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ABSTRACT

A comprehensive, four-phase study was undertaken of cooperative education for the Mid-Plains Nebraska Technical Community College area. Specific procedures and methodology utilized, and presentation and interpretation of data, are included in the chapters describing each phase of the study. Phase one included (1) a comprehensive review of the national literature concerning technical community colleges operating cooperative education programs, seeking to identify key issues, and (2) on-site visits to two-year Nebraska institutions and a survey of best practices in selected two-year colleges in other States. Phase two involved assessment of the vocational interests of a sample of 929 students (grades 9-12) in the Mid-Plains area. Phase three included assessment of occupational opportunities by sampling employers in the area (827 responding) and investigation of alternative possibilities for cooperative education. The final phase was development of a plan for the provision of a cooperative education program for the Mid-Plains Technical Community College area, based on the data gathered in the first three phases. Included are appendixes related to education policies, program offerings, and the instruments used and tabulated responses. (Author/NH)

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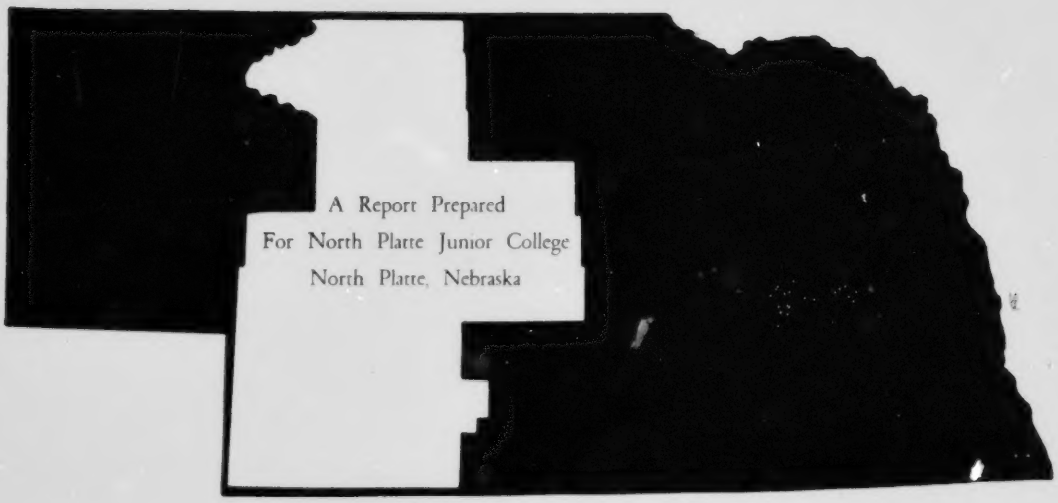
A STUDY OF CO-OPERATIVE EDUCATION IN THE MID-PLAINS TECHNICAL COMMUNITY COLLEGE AREA



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THE UNIVERSITY OF NEBRASKA-LINCOLN
LINCOLN, NEBRASKA 68508

TEACHERS COLLEGE
DEPARTMENT OF
EDUCATIONAL ADMINISTRATION

September 6, 1974

Dr. James Ihrig
Dean of Instruction
Mid-Plains Community College
North Platte, Nebraska 69101

Dear Dr. Ihrig:

In accordance with our agreement of December 27, 1973, transmitted herewith are 30 copies of a final report entitled, "A Plan for the Provision of Cooperative Education in the Mid-Plains Technical Community College Area". This report constitutes the comprehensive plan for the provision of cooperative education programs in the Mid-Plains Technical Community College area. The report is intended to serve as a guide to the development of unified and comprehensive cooperative education programs for the Mid-Plains Technical Community College area.

This report represents long and painstaking efforts on the part of the study participants. The task of the study participants was aided unmeasurably by the willingness of all who were asked to give of their time and energy in supplying information to the successful completion of this study.

The directors of the study are grateful to the various persons and agencies in the Mid-Plains area for their assistance and cooperation and to the various state agencies that offered suggestions and constructive critisms during the conduct of this study. Special thanks are extended to Mr. Richard Bringelson of the State Board of Community Colleges who was especially helpful at various stages during the progress of this study. A special commendation is also given to Mr. Elton Mendenhall, Director, Nebraska Research Coordinating Unit for Vocational Education, and to Mr. Jack Watkins, Graduate Assistant in the Department of Educational Administration at the University of Nebraska, who went way beyond the minimum requirements in providing direction in the completing of the field phases of this study. It has been a pleasure to work with everyone involved.

Sincerely,

David Hutcheson, Director
Bureau of Educational Research
and Field Services

DH:j
Encls.

A PLAN FOR THE PROVISION OF COOPERATIVE EDUCATION IN THE MID-PLAINS TECHNICAL COMMUNITY COLLEGE AREA

A Cooperative Study
made by

The Bureau of Educational Research
and Field Services

and

The Nebraska Research Coordinating
Unit for Vocational Education

A Service Provided by

Bureau of Educational Research and Field Service
Department of Educational Administration
University of Nebraska, Lincoln

A PLAN FOR THE PROVISION OF COOPERATIVE EDUCATION IN THE MID-PLAINS TECHNICAL COMMUNITY COLLEGE AREA

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CHAPTER I

INTRODUCTION

This report represents the culmination of a comprehensive study of cooperative education for the Mid-Plains Nebraska Technical Community College area. The report was prepared under the joint cooperation of the Bureau of Educational Research and Field Services of the Department of Educational Administration and of the Nebraska Research Coordinating Unit for Vocational Education, both of Teachers College, University of Nebraska-Lincoln.

The basic purposes of the study included:

A. The gathering of data and review of literature concerning technical community colleges operating cooperative education programs. Included in this phase of the study was (1) a comprehensive review of the national literature on post-secondary cooperative education programs in the two-year colleges with an emphasis on identifying the key issues and concerns underlying cooperative education programs, (2) on-site visitation of two-year post-secondary institutions in the State of Nebraska that presently operate programs associated with or supported by funds authorized by the 1968 Vocational Education Amendments (Public Law 90-576) to the Vocational Education Act of 1963 (Public Law 88-210) and on-site visitation of selected technical community colleges operating cooperative education programs not necessary under the 1968

Vocational Education Amendments, and (3) a survey of "best practices" in exemplary cooperative education programs in selected two-year colleges in other states.

B. The assessment of vocational interests of high school and junior high school students (9-12) in the Mid-Plains Technical Community College Service area. Included in this phase of the study was an assessment of vocational interests of junior and senior high students from selected school districts with high school (9-12) enrollments of 100 pupils or more located in the 18-county Mid-Plains Nebraska Technical Community College area. Included in the final sample were the districts of McCook, North Platte and Ogallala, plus ten other randomly selected school districts. The Ohio Vocational Interest Survey and the Minnesota Work Values Inventory were the two instruments which were administered to assess the vocational interests of the students. A total of 929 students were tested.

C. The assessment of occupational opportunities of employers in the Mid-Plains Technical Community College service area. As a part of this phase of the study, 1,116 employers were identified to be interviewed. Eight hundred and twenty-seven valid responses to the occupational opportunities survey were obtained. The final sample consisted of 328 employers from across the entire 18-county Mid-Plains Technical Community College area, together with 499 employers from the more immediate service area of the colleges, which consisted of

the 13 counties of Custer, Logan, McPherson, Arthur, Keith, Perkins, Lincoln, Chase, Hayes, Frontier, Dundee, Hitchcock, and Red Willow. In addition to the occupational opportunities survey, a Cooperative Education Resources Survey was administered to the same employers to determine possible alternative cooperative education possibilities which might be feasible with the cooperation of these employers. The survey of employers included businesses, industry, social agencies, governmental agencies and educational institutions.

D. The development of a plan for the provision of a cooperative education program for the Mid-Plains Technical Community College area. Based on the data gathered during phases I, II, III of this study, a plan for cooperative education in the Mid-Plains Technical Community College area was developed. This plan was presented to the appropriate personnel in the Mid-Plains Nebraska Technical Community Colleges and then finalized as shown in Chapter VIII of this report.

The report is organized according to the four phases presented above with Chapters II, III, and IV related to phase I, Chapter V related to phase II, Chapters VI and VII related to phase III, and Chapter VIII related to phase IV. The specific procedures and methodology utilized for each phase, along with the corresponding presentation and interpretation of data are included in the respective chapters describing that particular phase.

In addition to the data presented in this report, all of the actual data gathered for this study has been made available to the central

administration of the Mid-Plains Technical Community College area. That data, along with that presented in this report, should provide an excellent base for further planning of future programs to be offered in the service area.

CHAPTER II

RELATED STUDIES AND LITERATURE

Programs in cooperative education have recently included programs which are extensions of the community academic programs in which students through independent study, for instance, can serve in community agencies at tasks which have a relationship to the more professional aspects of the course work taken. As the result, the umbrella of cooperative education can include almost any program involving classroom study and off-campus experiences--programs variously designated as field experiences, internship programs, interlude programs, professional practice programs, experiential work, university without walls, industry periods, extramural term, cooperative periods, and interval programs.

More traditionally, Collins (Handbook of Cooperative Education; 1971, Ch. III), in accordance with the traditional definition of cooperative education, required that the following factors be adhered to in providing a cooperative education program: (1) the student's off-campus experience should be related as closely as possible to the field of study and individual interest within the field; (2) the employment must be a regular, continuing, and essential element in the educational process; (3) some minimum amount of employment and minimum standard of performance must be included in the requirement for the degree or certificate presented by the school; and (4) the working experience will ideally increase in difference and responsibility as the student progresses through the academic curriculum and, in general,

shall parallel as closely as possible the student's progress through the academic phase.

This section of the report will focus more on those key issues and trends of cooperative education gleaned from the literature and research as they pertain to the latter definition of cooperative education than the former. Additionally, this section will focus primarily on those studies pertinent to cooperative work education as they relate directly to vocational-technical programs. Although the major focus will be on post-secondary programs, a number of references with high transfer value, but conducted in a secondary school setting will be included.

The remaining sections of the report were organized around four major sub-headings: (1) the student/trainee; (2) the organization and administration of cooperative education, including such topics as organizational models, legal and contractual aspects, academic credit, financial considerations, appropriate facilities and equipment, role of the coordinator, work/study plans, selecting the work station, advisory councils, and establishing administrative relationships; (3) the program design, focusing on both the instructor and the program objectives; and (4) the area of program evaluation.

THE STUDENT/TRAINEE

Heermann (Cooperative Education in Community Colleges; 1973, Ch. 9) pointed out the necessity of a smooth induction of the student from his previous role (whether student or worker) into the role of a student/trainee. Job placement, as well as all aspects of the campus-based

program of students, was all-important for successful completion of the student's program and to the attainment of his perceived goals.

Hayes (Work Experience Education Programs--Innovations in the Junior College Curricula; 1969) in evaluating cooperative work programs in eight California two-year colleges and one four-year college found student satisfaction in the program and later success, both in business and industry and in upper-division work, to be related to student interests/goals being realized through job placement. Conversely, a second study by Hayes (Junior College Work Experience Education; 1969) found a correlation between student dissatisfaction and (a) conflicts in work and class schedules, (b) student over-interest in the paycheck, and (c) poor placement of students.

Barlow (A Survey of Junior College Work Experience Education Programs, 1962-63) identified these distinguishing features of the most successful programs: (a) the work experience was challenging to the student and closely related to program goals, (b) selective criteria for students had been established and implemented prior to actual induction to the program, and (c) evaluative procedures for the total program had been carefully designed and were objective in nature.

Description of the Rock Valley College Career Advancement Program (title identical; 1968) pointed out among the factors leading to the success of the program the need for (a) a referral system for students who request (or are inadvertently placed) in "inappropriate" jobs, and (b) provisions for special tutoring services for students having problems with their on-campus studies.

Student Characteristics

Heermann (Ch. 9) suggested the first task of the induction process was the testing and assessment of student needs, aptitudes, capabilities, personality, and interests.

Wood (An Evaluation of Illinois Post-High School Educational Programs in Agriculture; 1967) in obtaining employer ratings of students found that students rated high in integrity, dependability, cooperation, courtesy, personal appearance, attitudes, and emotional; that they rated average in initiative, judgment, and leadership; and were rated lowest on specific skills. Baron (Non-Intellective Variables Related to Successful and Unsuccessful Students in a Junior College; 1968) in assessing characteristics of students in electronics and in nursing programs, found that female students who entered the program with intentions of working part-time while preparing for a career were most likely to receive the highest ratings by employers.

Wamhoff (Self-Concept of Vocational Ability and Its Relation to Selected Factors in Career Development; 1969) discovered that although high level self-concept did not necessarily lead to high achievement, low self-concept did prevent high achievement. Vocational students rated themselves lower in academic ability; self-concept was closely related to their perceptions of how others would predict their chances for success in occupations; parents were significant contributors to self-concept; but socio-economic status of parents was not related to self-concept of vocational ability.

Golden and Weiss (Relationship of Vocational Satisfaction to the Correspondence of Job Reinforcement and Vocational Needs; 1968) discovered

that exemplary provisions for reinforcement of students were more helpful and effective with students who were most poised, self-assured. Job satisfaction for the student with less poise was not significantly enhanced by reinforcement techniques.

Klaurens (The Underlying Sources of Job Satisfaction of Distributive Education Student-Trainees; 1967) included in her "Recommendations" section of a dissertation study a set of principles which offer general guidelines that can enhance students' success in cooperative programs:

1. Criteria for selection of training stations should include evaluation of potential satisfactions in training positions.

2. Planned experiences on the job should provide opportunities for student trainees to experience psychological growth through work activities that challenge their abilities.

3. Student trainees should receive their initial training experience in positions where supervisors and co-workers are suitable role models and are individuals with whom the student trainees can interact.

4. Student trainees should enter the initial job with basic skills and some specialized competencies which will prevent them from experiencing failure and equip them to experience achievement, recognition, and responsibility in their training.

5. Student trainees should have learning experiences which help them to be tolerant of the needs, values, and personal characteristics of co-workers, supervisors, and customers.

Among those factors Klaurens identified as leading to job satisfaction was interpersonal relations with co-workers and supervisors. On the other hand, poor working conditions, failure to perform the job well, and lack of recognition for a job well done led to job dissatisfaction.

Heermann (Ch. 9) strongly urged that the initial assessment of students be followed by intensive orientation which would include in-depth interviewing and counseling; and that a cooperative education student

handbook is invaluable. The handbook should contain detailed descriptions of all elements of the program; job descriptions of student, co-ordinator, employer; and overall evaluation procedures.

Some of the literature dealt with the disadvantaged student in cooperative work programs. Aldridge (Curriculum for Disadvantaged Students in Higher Education; 1969) presented a paper at the A.P.G.A. convention in which he "issued a call" for expanding opportunities in cooperative education for the disadvantaged. Heermann (Ch. 9) enumerated the benefits to such students which result from their being educated in such fashion, not the least of which he pointed out was the opportunity to become self-supporting. Jones (The Relationship of Vocational Outlook and Special Educational Programs for Educable Mentally Handicapped; 1966) and Gorelick (An Assessment of Vocational Realism of High School and Post-High School Educable Mentally Retarded Adolescents; 1966) pointed to the necessity of close liaison with, and utilization of, the counseling services with the mentally and otherwise disadvantaged students if such students are to be successful in cooperative work programs. Both Jones and Gorelick found that the "Unrealistic" or "No Plan" student could experience success in the program, provided effective counseling services were afforded. Most significant was the finding that the male student with unrealistic or uncrystallized plans concerning vocational aspirations maintained to some degree those "deficiencies" throughout the program.

ORGANIZATION/ADMINISTRATION

Included in this section are discussions concerning several topics related to the organization and administration of cooperative education. These topics are: organizational models, legal and contractual aspects, academic credit, financial considerations, appropriate facilities and equipment, role of the coordinator, work/study plans, selecting the work station, advisory councils, and establishing administrative relationships.

Organizational Models

Comprehensive program models are essential to the success of any program. As indicated by several of the studies quoted in this section, weak points or apparent failure of total programs could be traced in most instances to the lack of planning; to the absence of carefully planned detailed designs and strategies. Such designs enable total conceptualization and give ready access to each component part in its relationship to the total construct, as well as ready reference points when specific objectives and job or role expectancies must be identified.

Wallace (Review and Synthesis of Research on Cooperative Vocational Education; 1970) presented a comprehensive model which could be used in conceptualizing cooperative education. (See Figure 1.) In translating the conceptual model into an organizational model, Heermann (Ch. 5) presented seven alternative organizational "locations" for cooperative education in the administrative structure, noting that each had its advantages and its disadvantages. The decision, according to Heermann,

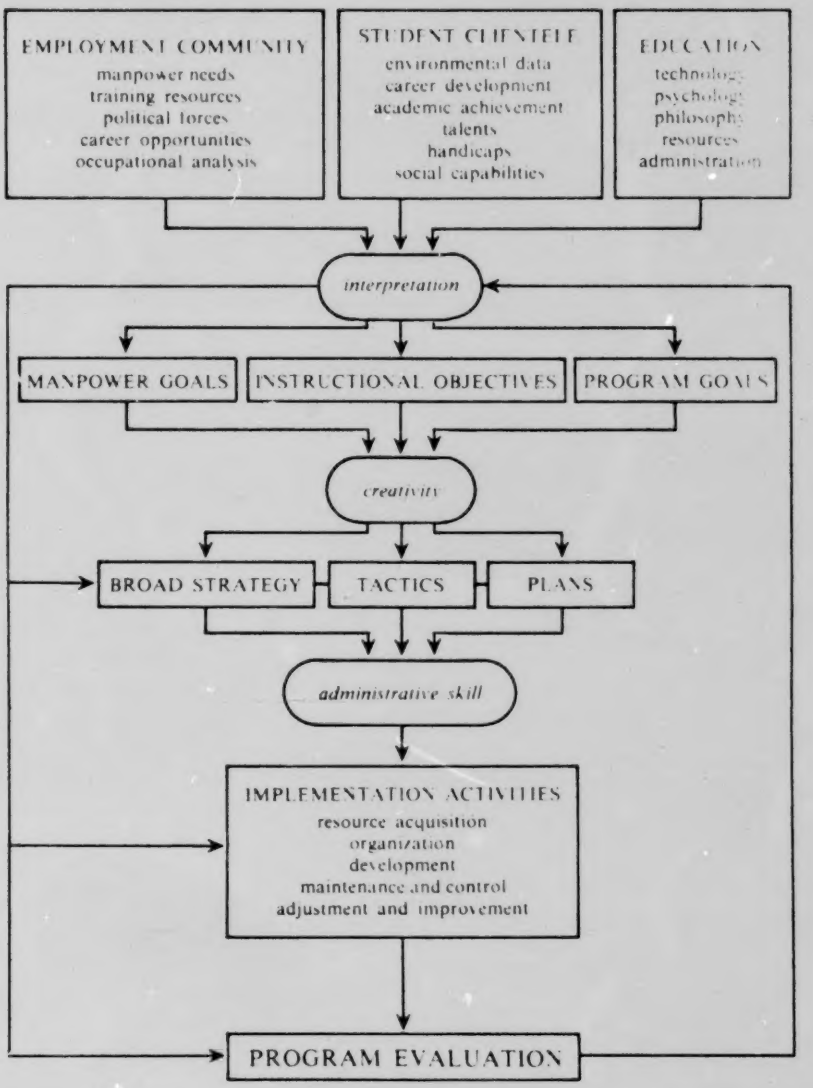

Figure 1

Occupational Program Development Model

rested with the mission and philosophy for the college as a whole, and for the cooperative education program in particular.

Seven organizational plans were offered by Heermann (illustrations for each are contained on following pages).

1. Centralized administration and coordination as an adjunct to student services.

2. Centralized administration and coordination as an adjunct to academic affairs.

3. Centralized administration and coordination as an autonomous organizational activity having co-equal authority with student services and academic affairs.

4. Centralized administration in academic affairs and decentralized coordination as an adjunct to departmental and divisional instructional levels.

5. Centralized administration in academic affairs and decentralized combined-function coordination at the departmental and divisional instructional levels. Coordination and instructional responsibilities are combined, in persons usually given the title of instructor-coordinator.

6. Decentralized administration in an instructional branch of the college coupled with decentralized combined-function or separate-function coordination.

7. Centralized administration in student services with decentralized coordination as an adjunct to departmental and divisional instructional levels, which may be either combined-function or separate-function.

The advantages and disadvantages of each of the seven alternative designs are given in conjunction with each chart. Wilson (Survey of Cooperative Education; 1972) indicated the majority (42.3 percent) of programs operate as separate departments, answerable to a vice-president or academic dean, whereas over 39 percent are centralized but answerable to a specific department (such as Vocational-Technical Department or Division).

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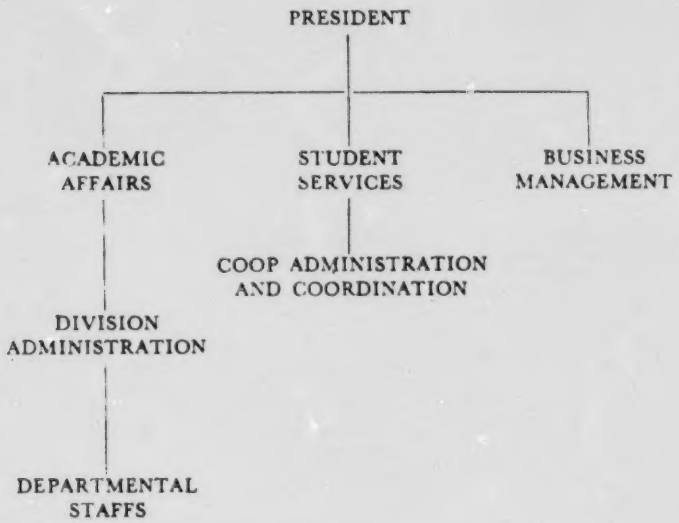
Alternative (1) the centralization of the department in the student services area, allows for a close working relationship with placement, counseling, and financial aid personnel, but it limits a close identification with academic affairs in achieving a careful blending of work and study ingredients.



ORGANIZATIONAL ALTERNATIVE (1). Centralized administration and coordination as an adjunct to student services.

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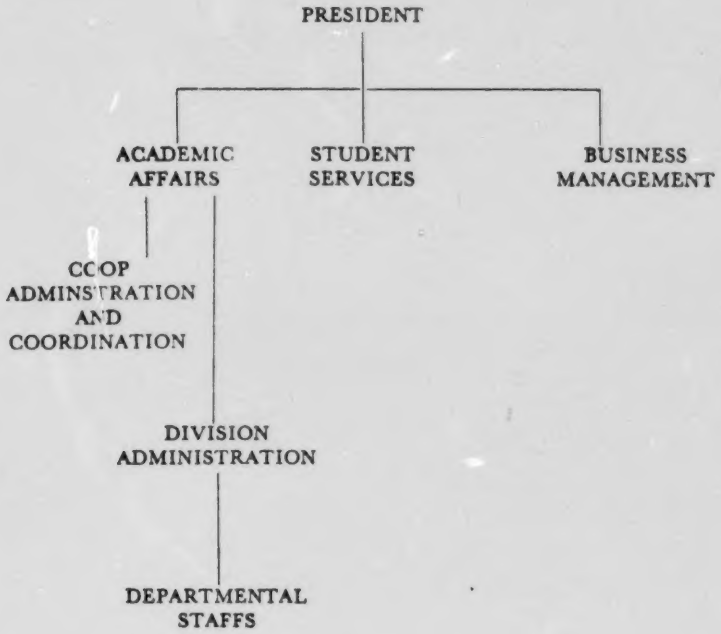
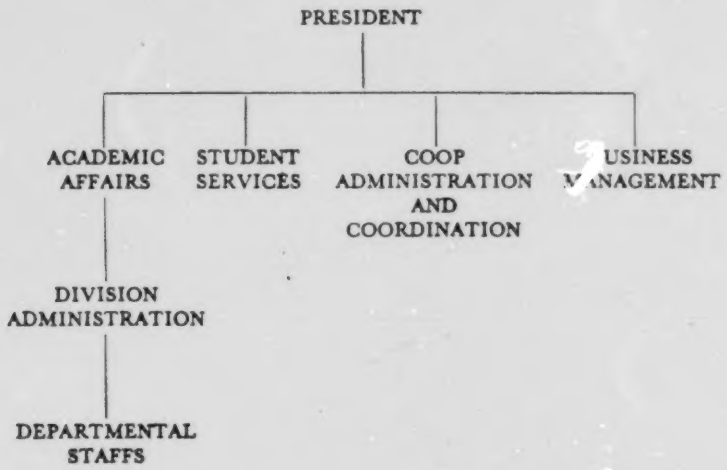
Alternative (2) provides for a closer rapport with the traditional academic endeavors, but because the coordination activity is centralized it is still removed from the instructional areas, and a close affiliation with counseling and other student services activities is sacrificed.



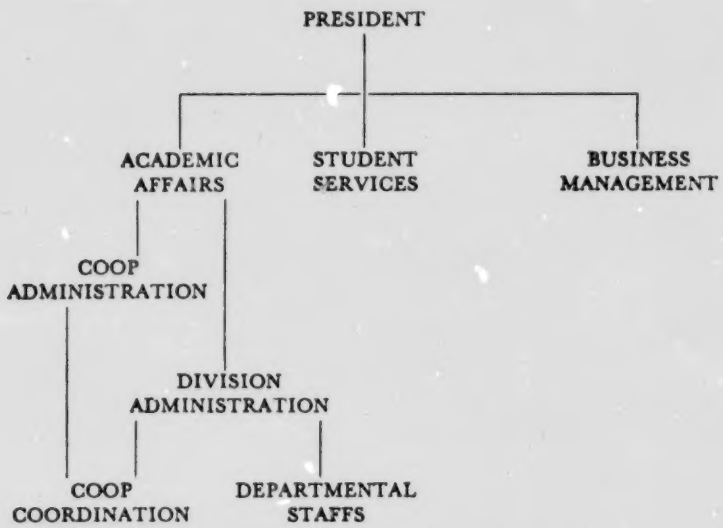
ORGANIZATIONAL ALTERNATIVE (2). Centralized administration and coordination as an adjunct to academic affairs.

Alternative (3) is characterized by the same weaknesses attributed to (1) and (2), but it has the special advantage of autonomy. This organizational placement reflects its relative importance to institutional goals and philosophy coupled with what is likely to be a strong administrative commitment to its purpose.



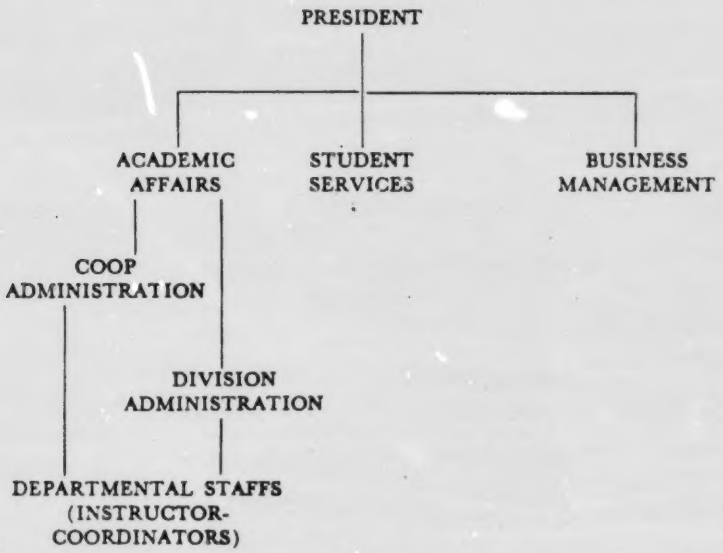
ORGANIZATIONAL ALTERNATIVE (3): Centralized administration and coordination as an autonomous organizational activity with coequal authority with student services and academic affairs.

Alternative (4) offers the special advantage of close rapport between traditional faculty members and cooperative coordinators, which makes possible a stronger bonding of work and study; its disadvantages include separation from the centralized department and having responsibility under two lines of authority, one leading to the instructional department and one to the cooperative administrator.



ORGANIZATIONAL ALTERNATIVE (4). Centralized administration in academic affairs and decentralized coordination as an adjunct to departmental and divisional instructional levels.

Alternative (5) has the same advantages and disadvantages as number (4), and it offers the special feature of combining instruction and coordination in the same person, which provides an extremely strong work and study integration for students as well as keeping the instructor alert to changes in his occupational specialty.



ORGANIZATIONAL ALTERNATIVE (5). Centralized administration in academic affairs and decentralized combined-function coordination at the departmental and divisional instructional levels.

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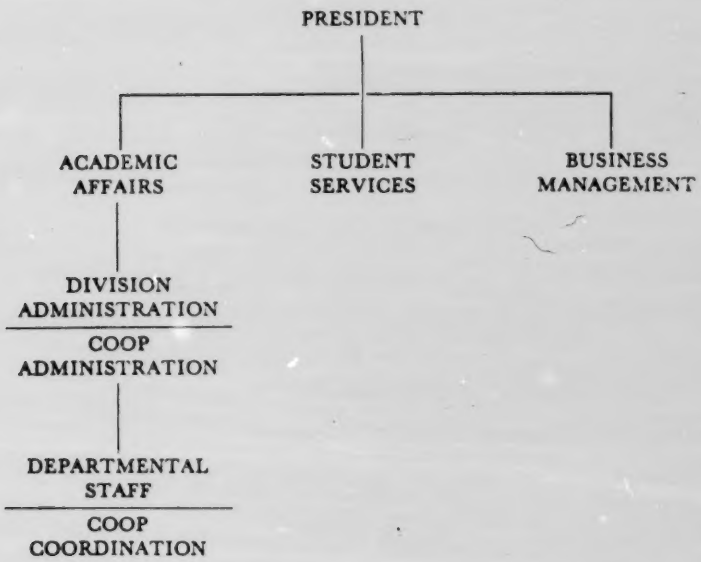
Alternative (6) has advantages and disadvantages similar to (4) and (5), but by decentralizing administration it makes for a closer working relationship between coordinators and co-op program directors despite the disadvantages of fragmenting co-op (in effect creating many co-op education departments that are attached to program or discipline areas); Co-op typically thrives on a cross-fertilization of placements, avoiding the kind of competition between departments that is created here.



ORGANIZATIONAL ALTERNATIVE (6). Decentralized administration in an instructional branch of the college coupled with decentralized combined-function or separate-function coordination.

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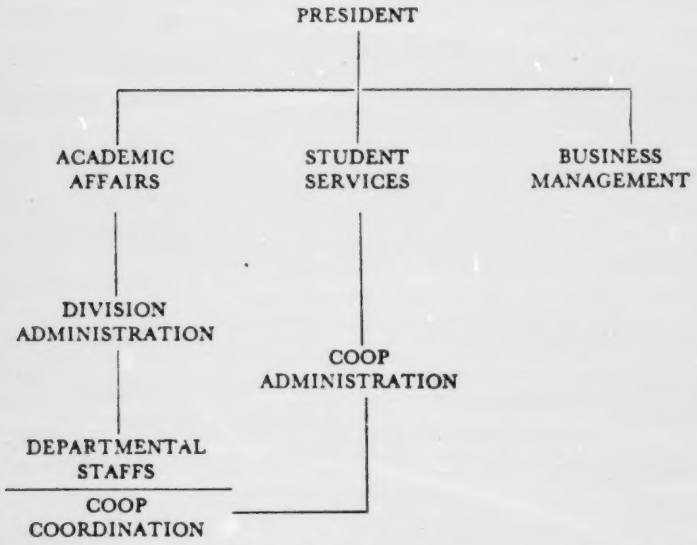
Alternative (7) maintains the advantage of a close rapport with student services and establishes the critical coordination function as a faculty responsibility; this insures a careful merging of work and study, but does so at the expense of additional administrative difficulties caused by dual lines of authority and separation of administrative and coordination functions.



ORGANIZATIONAL ALTERNATIVE (7). Centralized administration in student services with decentralized coordination as an adjunct to departmental and divisional instructional levels which may be either combined or separate function.

The advantages of complete autonomy, subject only to the president's review, are obvious to program coordinators. However, this rationale could be used with every department or function, thereby fostering a fragmentation of total program of an institution.

Legal-Contractual Aspects

Knowles (Handbook of Cooperative Education; 1971) pointed out the oft-overlooked contractual agreement between the college and the student which is found in many sections of college catalogs, brochures, and other publications. Care must be exercised to indicate the college's intention to identify job opportunities for students who meet the necessary qualifications.

Although the student and employer must be the only contractual parties regarding the actual conditions/terms/status of employment, the college is still legally responsible to point out safety features in connection with each particular job placement. Fees may not be charged students for placement services in the cooperative work program.

Whereas it is essential to have in writing all aspects of the specific job placement, skills to be learned, tasks to be performed, reports to be completed, . . ., copies of which are given to all concerned, the college should avoid making a fixed commitment to any firm to supply student trainees; to do so is to leave the college legally liable in the event no student is placed with that particular business.

The legal status of the student during work is a somewhat confused one. A veteran who maintains draft-exempt status is at present not eligible for veterans' benefits unless the minimum number of college

credits (for eligibility of benefits) are taken. Most colleges do not award the equivalent of a "full-load" in credits for the work experience. (It is also unclear whether the Veterans Administration "counts" academic credit granted for work experience as college credits for veterans benefits.) On the other hand, when a veteran is engaged in full-time work experience, the time lapse of this period does not count against him in the determination of the total time during which he must apply for his benefits.

The student's wages are taxable; his eligibility for union membership determined by the specifics of the job situation (and title) and thereby his eligibility to any benefits of union membership. Colleges should avoid involvement in these two matters. They are exclusively the concern of the student and employer.

A foreign student on a student visa is restricted by law to work directly connected to his education course of study, and can be so employed no longer than six consecutive months, and eighteen months totally during the span of his visa. Notation to this effect should appear in the college's literature regarding cooperative work programs.

Colleges cannot practice discrimination on grounds of race, age, gender, color, or creed; and should avoid/eliminate from any cooperative program arrangements employers who do so.

Although students commonly sign an agreement regarding the specific job placement, penalties for early termination of the work experience must be limited to loss of academic credit. The agreement cannot be viewed as a contract of employment, and the wording of the agreement should so stipulate.

Many colleges now offer students the option of a "closed" or "open" file for purposes of recommendations used in job placement. This somewhat recent development has resulted from cases involving "invasion of privacy" issue. All parties (college, student, employer) should be made aware of these options and the type of file chosen by the student.

In short, although the college should in its task of careful screening of the job sites take every step to assure the educational aspects of the work experience, and have written agreements to that effect, the student-college relationship and legal responsibilities are restricted to the academic aspects of the cooperative work program, while the student-employer relationship is binding to the work/employments phases of the program.

A number of "Guidelines" have been published in which the various qualifications, job expectancies, relationships, legal requirements and utilization of the various steps in program design are presented. Butler and York (What School Administrators Should Know About Cooperative Vocational Education; 1971) outline for administrators those general factors pertaining to funding of programs, the supervisory/coordinating role, utilization of advisory councils, equipment and facilities, and elements of program evaluation. Another publication by the same authors (What Teacher-Coordinators Should Know About Cooperative Vocational Education; 1971) identified those facets of the program which would be most pertinent to the coordinator--assessment of student needs/interests; identification of community resources; and selection of on-job training sites. Yet a third resource by Butler and York (What State Leaders

Should Know About Cooperative Vocational Education; 1971) provided identification of key points related to statewide promotion and expansion of cooperative education programs, the identification and training of regional coordinators, as well as overall program planning and evaluation.

Stemming from a seminar at the Center for Vocational and Technical Education at Ohio State University, Huffman (Guidelines for Cooperative Education and Selected Materials; 1967) edited materials containing guidelines dealing with (1) the institution, (2) the employer, (3) teacher-coordinator, (4) student-trainee, and (5) the program itself.

Academic Credit

The question of granting academic credit for work experience had not been totally resolved; yet a definite and accelerating trend has indicated that as the work experience becomes more closely related to the educational objectives of the cooperative work program, academic credit was awarded.

By 1974 about three of five colleges had instituted the practice of awarding credit for the job experience; the credit usually dependent upon minimum numbers of off-campus assignments and final reports of a more academic nature. Employers, however, expressed disfavor of the policy when it resulted in additional time and effort on their part.

Corollary to the issue of granting academic credit has been the trend of enrolling students, who were on the alternate-semester plan, for academic credit during the semester when they were working full-time. Where policies prevailed for not enrolling students when they were

full-time on the job, instructor/student ratios and total program enrollment figures failed to reveal an accurate picture.

Financial Considerations

Heermann (Cooperative Education in Community Colleges; 1973) noted that mandatory alternating-semester programs (wherein students are full-time students one semester and full-time employees the subsequent semester) which have substantial enrollments are often financial assets. Another plan such as the half-day alternation program can only be self-sufficient if the group working in the morning is reasonably equal or similar to the afternoon-working group in size, type of program taken, skill development and academic background. In those instances the academic courses on campus can be duplicated for the morning and afternoon shifts, as well as the job assignments and skill development/task oriented aspects of the work experience.

Knowles and Woolridge (Handbook for Cooperative Education, 1971) suggested a financial advantage exists for a year-round education program on campus wherein maximum utilization of coordinators, faculty, staff, work stations, students and other facilities is afforded. (The obvious effect upon the financial situation of enrolling students on the alternate-semester plan while they are working full-time, in order to grant academic credit for attainment of educational objectives through the work experience, should not be overlooked.)

Appropriate Facilities and Equipment

The comments which follow concerning facilities and equipment are based on the Guide for Cooperative Vocational Education published in

1969 by the University of Minnesota. When making decisions regarding facilities and equipment, program planners for cooperative education must be kept aware of the fact that poorly equipped and improperly located classrooms may be more conspicuous in cooperative education than in traditional programs because of the close relationship between school and community. Students who come into contact with the latest equipment in their work experience will soon become conscious of out-moded school environments. Classroom facilities and equipment must be such that they facilitate the teaching and practice of occupationally relevant skills and competencies. Additionally, easy access to the coordinator's office and classroom for the students, employers, and resource visitors is an important consideration to enhance working relationships. Good facilities have a pronounced psychological effect on the cooperative education student and the staff the student works with.

The Coordinator

Brown (Cooperative Education; 1971) advanced a somewhat different perspective concerning the role of the on-job supervisor and/or employer. According to Brown, the employer/supervisor assumes full responsibility for selection, orientation, employment, on-job training, supervision and evaluation of student performance. (This approach causes one to reflect on the conclusions reached by several studies that suggested that as a student becomes concerned with production on the job, his attitudes toward the learning or educational opportunities of the work experience decrease. Would employers keep the educational aspects of the experience in proper perspective? Ed.)

In the same vein was the 118-page Handbook on Work Experience Education, A Guide to the Organization and Operation of Work Experience Education Programs published by the California State Department of Education in 1965. Within this handbook is a step-by-step outline of procedures (and legal responsibilities) for implementing cooperative vocational programs from inception to evaluation. Of particular interest may be the somewhat specific responsibilities of each participant in the program--coordinator, student, employer, counselor, as well as chief administrator.

Another such resource, Guide for Cooperative Vocational Education, published by the University of Minnesota, resulted from a national meeting and subsequent regional conferences of vocational educators; representatives from business, industry, labor, governments, education and the general community. In the appendix are included checklists which deal with procedures for the establishment of cooperative programs and recommended practices.

Davis (Supervising Occupational Experience Programs, A Special Conference Report; 1966) reported on a workshop in which nine participants prepared a handbook for operating supervised occupational experience programs. A section included in this particular handbook which is not always included in others is that which deals with the selection of work stations, or job sites.

Wilson (An Investigation of Factors Essential to Selecting and Preparing On-The-Job Trainers for a Post-Secondary Cooperative Vocational Technical Education Program; 1970) in a dissertation study concluded that the primary control of on-the-job trainers rested in the

hands of the teacher-coordinator; little training of the trainer was evident; and the result was an increasing breakdown of the relationship between program objectives and work experience.

The Wyoming State Department of Education in 1970 issued a report containing workshop materials (Wyoming Cooperative Occupation Education: Workshop Materials) that included a listing of the qualifications of coordinators, as well as the legal requirements for the establishment of cooperative education programs.

Work/Study Plans

Of more limited scope was the report of a two-year project in three colleges in the San Mateo Junior College District (Cooperative Education in the San Mateo Junior College District: A Two-Year Demonstration Project in Community College Cooperative Education). Within the report was a description of the alternative structures employed by the colleges to the design of study and work elements. One approach involved alternative work and study semesters. Under this plan of alternation the summer is used for study or work. The utilization of the twelve month calendar for both work and study reduces the extension of the length of time needed to complete the program and makes it possible to keep cooperative jobs filled on a year-round basis by pairs of alternating students. Depending on the amount of work experience required, cooperative programs may extend the time of the total program from three months to one year. In Table 1 is an illustrative study and work calendar for a two-year college on a quarter system.

Table 1

ILLUSTRATIVE STUDY AND WORK CALENDAR
FOR A TWO-YEAR COLLEGE

Year in College	Quarter of the year	Summer Entrants	Fall Entrants
First Year	Summer	Study	
	Fall	Study	Study
	Winter	Work	Study
	Spring	Study	Work
Second Year	Summer	Work	Study
	Fall	Study	Work
	Winter	Work	Study
	Spring	Study	Work
Third Year	Summer	Study	Work
	Fall	Work	Study
	Winter	Study	Work
	Spring	(Optional Study)	(Optional Study)

This particular matrix allows most adaptable arrangements for cooperative employers and for seasonal job placement. Multiple entry and exit points provides flexibility for variable schedule and length of courses and can be modified for the trimester or semester calendar and allows for graduation in three years or less.

Another work/study approach was the "parallel" construct wherein the students are on a half-day alternation of study and work periods under the supervision of the college during the academic year with possible extensions through the summer. A third work/study strategy, commonly used, involved full-time work with part-time evening study. In colleges located near sources of employment, both of these procedures are fairly common practices.

According to Knowles and Woolridge (Handbook of Cooperative Education; 1971), opinions differ widely on the most desirable calendar for the cooperative plan. Difficulties often occur, especially in sequential courses, in colleges with optional cooperative programs because curricula are planned for students in full-time study and the cooperative students need to fit their schedules into the conventional curriculum. Institutions must establish a clearly visible academic schedule for cooperative courses. Also, curricula for cooperative students should be planned so students have adequate specialized courses early in their programs to provide for needed qualifications for appropriate job placement. In summary, those who plan the content of an academic cooperative education program should consider fully the experiential phase of the student's program.

Selecting the Work Station

Based on the University of Minnesota Guide for Cooperative Vocational Education, the success of the cooperative vocational education program depends on careful and considerate selection of suitable work stations. The employer must be both capable and willing to deliver quality on-the-job training. Definite criteria ought to be established for determining what constitutes a suitable work station. The Vocational Amendments of 1968 specifically stated that on-the-job training should be "related to existing career opportunities susceptible of promotion and advancement," and "does not displace other workers who perform such work."

It was also stated in the handbook that it is essential that employers make a definite commitment to the cooperative education program. Training agreements are a common procedure. The effectiveness of the on-the-job experience which the student obtains is very much dependent on the personnel who do the training. Human relations and sensitiveness to student needs are key ingredients.

Advisory Councils

Little controversy existed over the advantages (or necessity) of utilizing lay advisory councils. Concern was, however, expressed about the proper utilization of such groups. Shenker (Advisory Committees for Cooperative Education Programs; 1968) authored a helpful source for coordinators which dealt with the composition and function of advisory councils, the organizational and operational features.

A similar publication to that by Shenker was the 1966 Advisory Committees: Selection and Use publication by the Ohio State Department of Education which treated the use of advisory committees for distributive education programs.

Heermann (Ch. 5) outlined basic make-up and function of the various advisory committees in this fashion:

1. Central Coordinating Advisory Committee--20 to 40 members of community's most influential members. Primary purpose is to identify broad areas of educational need within the immediate community.

2. Steering Committee--advise college on the precise nature and extent of need for a certificate, diploma, or associate degree program. Make-up up to 25 members.

3. Program Advisory Committee--six to twelve member group which helps develop the program itself, assists in public relations, identifies suitable job placements, provides occupational

data and resource speakers, develops standards for assessment of work and study performances. Recommended for each occupational program.

4. Cooperative Education Advisory Committee--policy making group representing the entire spectrum of occupational areas in the community. Also has as primary function "trouble shooting," the handling of specific problems as they arise within the on-going programs; not secondarily, the committee members are public relations liaisons between college, the program, the students, and the community at large.

5. Cooperative Education Task Force--includes college personnel, guidance people, administrators and faculty and students. Ten to twenty members, its purpose is to understand how cooperative work experience lends itself to the mission and philosophy of the institution, seek ways for the betterment of cooperative education in general, and monitor the communications on campus of all elements within the program and those not directly involved.

It should be noted that Heermann does not recommend that colleges form each of the types of committees named above; however, it was recommended that the various functions as identified above be assigned as part of those committees which are formed.

Billings (Cooperative Occupational Education Programs--A Conference Seminar to Extend the Range of Vocational Education Fund Report; 1970) presented some very succinct, definitive guidelines for developing advisory committees: (1) ensure all members understand their duties; (2) include people on the actual job--employees, supervisors, and employers; (3) stagger office terms; (4) include personnel directors or those with hiring capacity; (5) include labor and manpower groups; (6) add persons with access to media; (7) include college-trained personnel; (8) representation from small as well as large businesses; and (9) organize regularly scheduled meetings. Committee membership should extend from one to three years, on staggered rotation basis,

thereby assuring participation by a large number of individuals over the years. The extension of invitations for committee membership should come from the president. All committees should elect officers; a president, vice-president, and recording secretary would be minimal.

Establishing Administrative Relationships

According to Knowles and Woolridge (Handbook of Cooperative Education; 1971), good public relations is the key to any successful program involving people and cooperative education is no exception. A good teacher-coordinator is one who establishes smooth working relationships with students, faculty members, supervisory and guidance personnel, special services staff, administrators, and the employer. Good communications and good working relationships are the key. Of particular importance is the student. The program image will typically be a reflection of what the program achieves in the personal development of the individuals who receive the training and instruction. Their job performance, attitude, and appearance communicate to others what the program can accomplish.

PROGRAM

Program design can include as many variables as the breadth with which one attempts the definition. Most broadly it can include everything from the selection of a president of the institution whose philosophy certainly adds or detracts from the program. In this treatise, treatment will be limited to: (1) the coordinator as classroom instructor; for although the coordinator has been treated briefly

in a previous section, it was more from his role as administrator-coordinator; and (2) the recommended procedures for designing curricular elements. His role as classroom instructor will be treated here.

The Instructor

Kaufman (The School Environment and Programs for Dropouts; 1968) used a structured interview technique to identify those elements which could be directly related to the success or failure of two groups of instructors in cooperative work experience programs. His findings indicated:

1. Ability to relate to students was highly crucial. Student-centered approach to teaching, insight, personal flexibility, tendency to be self-critical, and willingness to "listen" were major correlates of this factor.

2. Success as a teacher depended upon flexibility and creativity in classroom techniques, personal dynamism, and willingness to expend effort, time, energy well beyond expected minimums.

3. Personal attitude is significant. A concerned, caring, positive, accepting attitude was considered basic for acceptance by students.

Studies by Olson (Personality Characteristics and Job Satisfactions of Distributive Education Coordinators; 1967) and Lesh (The Non-Professional Worker in Youth Employment Programs; 1966) support the findings by Kaufman. In addition, the study by Olson identified those elements which led to the feelings of job satisfaction by the instructors. Those elements were: (1) feelings of accomplishment, (2) ability to keep busy, (3) opportunities to be creative, (4) chances to work alone on the job, (5) lack of conflict with moral values, (6) freedom to use own judgment, (7) job security, (8) opportunities to serve others, and (9) variety of tasks to perform.

One interesting study by Samson (Critical Requirements for Distributive Education Teacher-Coordinators; 1964) used the critical incident approach. His findings indicated that instructors who were younger, lower salaried, less formally educated, and less experienced in teaching received higher ratings on the critical incident tests. The longer the experience in occupational experience, the higher the rating received by the teacher.

Two studies were found which dealt with effective means for training the teacher/coordinator. Pratzner and Hanson (The Relative Effectiveness of Two Ways of Structuring and Presenting Pre-Service and Initial In-Service Vocational-Industrial Teacher Education Lessons; 1969) found that sound motion pictures when used in the training of part-time industrial education instructors, was a more effective means of presenting fundamental concepts of teaching than was the traditional in-class method. Brown (Micro-Teaching and Classroom Teaching Skills; 1968) in his dissertation study reported that when using micro-teaching, the acquisition of five of six basic instructional skills was significantly implemented, whereas in using the traditional instruction tactic, only one of the six skills was judged to have been significantly adopted.

The Program of Studies

Identification of the objectives, content and performance criteria for inclusion in the study aspect of cooperative work experience programs was done in two ways. The first and the one with the longer history results from workshops, institutes, and seminars or conferences. This tactic usually results in a syllabus-type set of guidelines, table

of content for subject matter, and a number of suggested resources. On occasion, worksheets or assignment sheets for students are included. Two such reports are first Brown's (General Related Study, Coordinator's Manual; 1965) which contained in addition to assignment sheets, answer keys, suggested teaching aids and guest speakers, an annotated list of 30 motion picture films on various aspects of cooperative education. The second, published by the Arizona State Department of Vocational Education (Cooperative Education: General Related Instructional Units; 1970) was a 162-page textbook-type study guide organized into ten units or chapters, including assignments and worksheets.

The second and most current approach to program design, and one for which funding has been most available in recent years, was the task analysis model. The basic tact employed was that of occupational analysis for the purpose of providing information to be used in deriving instructional content and objectives. Allen's study (A National Study of the Aviation Mechanics Occupations; 1966) exemplified the strategy of the task analysis model. He submitted by questionnaire to aviation mechanics in four somewhat different work settings (airline station, airline overhaul stations, large general aviation companies, and small general aviation companies) a series of questions concerning the tasks performed by the aviation mechanic. Responses for the participating 401 companies and stations were submitted to a computer which summarized the data in 52 tables, each representing a major topic heading and the sub-topics thereunder. A core curriculum for the training of aviation mechanics resulted from a subsequent analysis of the tables by an

advisory council. Topics and sub-topics were classified by teaching levels and testing levels according to Bloom and Krathwohl's taxonomy.

Ertel (Identification of Task and Knowledge Clusters in General Merchandise Retailing; 1967) conducted one of a series of studies sponsored by Washington State University, all using basically the same procedures. A checklist questionnaire was developed in association with employers, employees, and vocational-technical instructors. This checklist included data concerning age, sex, experience, types of tasks performed by employee and supervisor. Since the checklists were quite long (225 items for employee and 332 for supervisor), Ertel took steps to ensure return of the instruments through personal contact with employers. The resultant data were classified according to occupational status and length of experience, thereby enabling the researcher to identify cluster skills which not only were required for entry level and early years of employment, but those skills which could be classified as career and advancement oriented.

One study combined elements of both strategies. Following task analysis of the jobs, Crawford and Cross (Work-Study Programs for Slow Learning Children in Ohio Schools, Guidelines; 1967) submitted the resultant list to a jury of specialists in the field of cooperative education for their reaction to clarity and appropriateness. The jury members were also asked to cross out any job designation which they felt did not require the designated competency substituting other job titles they deemed appropriate.

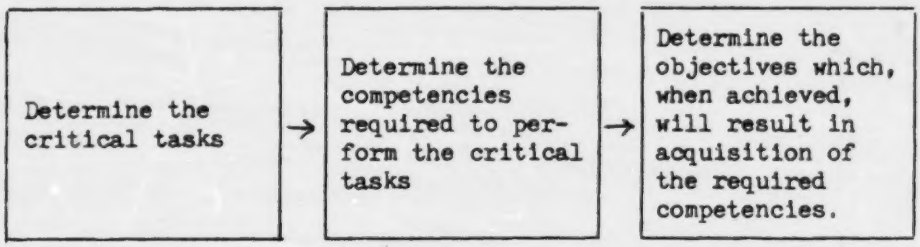
Carmichael (An Analysis of Activities of Middle Management Personnel in the Retail Trade Industry with Implications for Curriculum

Development in Post-Secondary Institutions; 1968) in his doctoral study added an element to the studies by Crawford and Ertel. Activities (or skills) were ranked according to their degree of importance to the job. The tabulation of frequency of occurence of activity and of the importance of the activity yielded a "common core" of activities deemed essential for success in retail middle management.

A similar approach to the Crawford and the Carmichael studies, but in simplified form, was conducted by Clark (Vocational Competencies Needed for Employment in the Agricultural-Chemical Industry in Michigan; 1966). Clark focused on a single industry, with emphasis on essential functions rather than on-job titles. Nine functions basic to the industry were initially identified by the researcher. Validation was then obtained through use of a "jury of experts" from that industry. Next, for each function a list of essential competencies were identified; again, validation through use of a jury. The last step was the assignment of relative importance to each competency; this was done by going directly to the representative of the industry.

Course/Unit Objectives

Identification of instructional objectives through the task analysis model becomes the next logical step as shown below:


Determine the critical tasks
Determine the competencies required to perform the critical tasks
Determine the objectives which, when achieved, will result in acquisition of the required competencies.

The resultant instructional objectives appear very similar to the critical tasks and required competencies on which they were based. Petro (The Derivation of Learning Hierarchies and Instructional Objectives in Accounting with Implications for Developing Instructional Systems for Post-High School Programs; 1969) in his doctoral study concerned himself exclusively with the derivation of instructional objectives. He "fractionated" each activity into concepts, skills, and operations. Flow charts were prepared, one for each of the tasks, showing interrelationships of component concepts, skills and operations. A jury of experts was used to validate the objectives. The resultant list included "task demand statement" accompanied with a group of instructional objectives needed to demonstrate the "terminal behavior."

Specific and defined outcomes stem from several sources--the student, the teacher-coordinator, and the business/industrial job site. Table 2 and Figure 2 accompanying this section were taken from Heermann (Ch. 8) and indicated means whereby objectives might be derived, and the various types of defined outcomes or objectives.

PROGRAM EVALUATION

Program evaluation studies are of two types: (1) follow-up studies of graduated students, and (2) descriptive reports of programs. Goff (Survey of Present Methods of Follow-Up of Public Post-Secondary School Graduates in Cooperative and Preparatory Vocational Programs and the Development of Follow-Up Procedures; 1968) found that slightly more than half of the cooperative work programs made provisions for follow-up studies, and in most instances students were surveyed prior to graduation.

TABLE 2

FOUR TYPES OF DEFINED OUTCOMES

Category of Objectives	*Type (a)*	*Type (b)*	*Type (c)*	*Type (d)*
Central Characteristic	Broad program objectives	Classroom objectives	Work period objectives	Interface of study and work objectives
Scope	Macro	Micro	Micro	Micro
Objective Setter	Program director in conjunction with advisory committee	Classroom instructor along with student inputs	Coordinator, employer, and student	Instructor-coordinator along with student inputs
Nature of Outcome	Defines outcomes of completion of entire work-study program	Defines outcomes upon completion of unit of study	Defines the outcomes of completion of cooperative work period	Defines outcomes of interrelating work and study and their impact on achieving educational objectives
Experiences Necessary for Achievement	Completion of associate degree requirement	Learning activities provided in class, and preferably related to work experience	Work experiences achieved via the cooperative work period	Consideration of the relationship of work and study periods via a written report

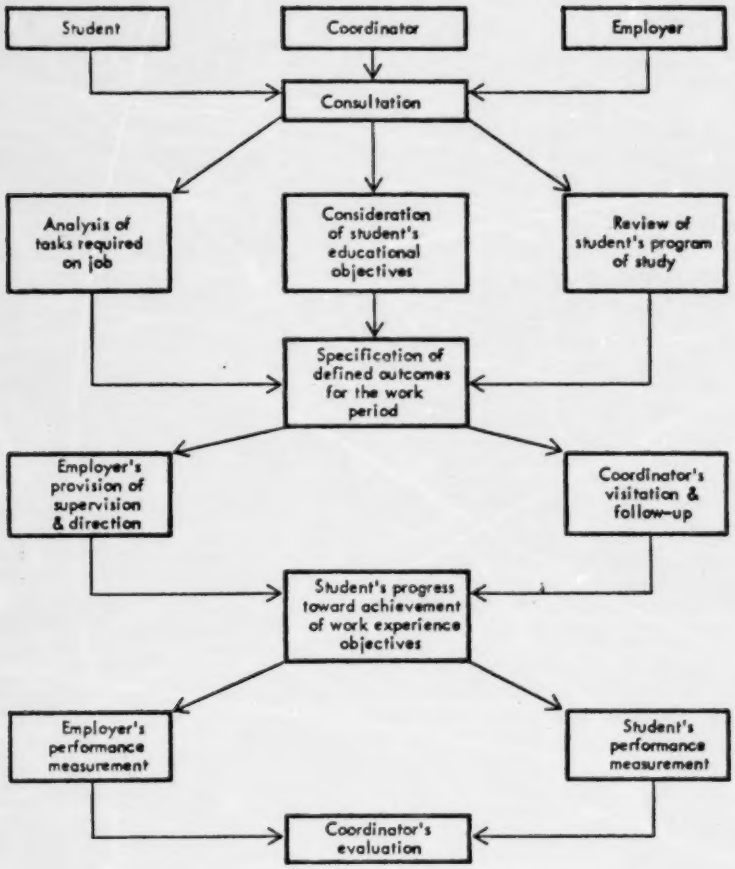


Figure 2

Tripartite Relationship in Defining and Evaluating Cooperative Education Outcomes

He recommended subsequent and periodic follow-up studies of the same students. Chandler (Project Accent--A Cooperative Program of San Bernardino Valley College and Surrounding High Schools in Auto-Mechanics, Applied Electronics, and Office Occupations: Training in Grades 11, 12, 13, and 14; 1967) recommended in his study that in order to increase the "holding power" of cooperative education programs, counselors be retrained for increased effectiveness in vocational-technical counseling, that course content be validated, that field/work experience be increased, and that additional efforts at public relations be exerted to enhance the image of vocational courses.

The Rock Valley report, alluded to in the section related to Students, included in its description two additional elements related to program evaluation and increased effectiveness: (1) that a single liaison person on campus and a single liaison person in each business or training site be identified in order that communications be simplified and (2) closer relationships between study and work be effected.

Heermann (Ch. 4) offers a comprehensive diagram that is useful in the planning for continuous, systematic and comprehensive evaluation (see Figure 3).

(There appears to the writers to be an obvious gap or oversight in the attempts at program evaluation. No studies or descriptions of programs designated as attempts at assessment and evaluation have employed the task analysis model described in the previous section on Program. Surely some identification of the same tasks, the same instructional objectives or the same performance skills have relevance after the student enters the business and industrial world. If our partners in

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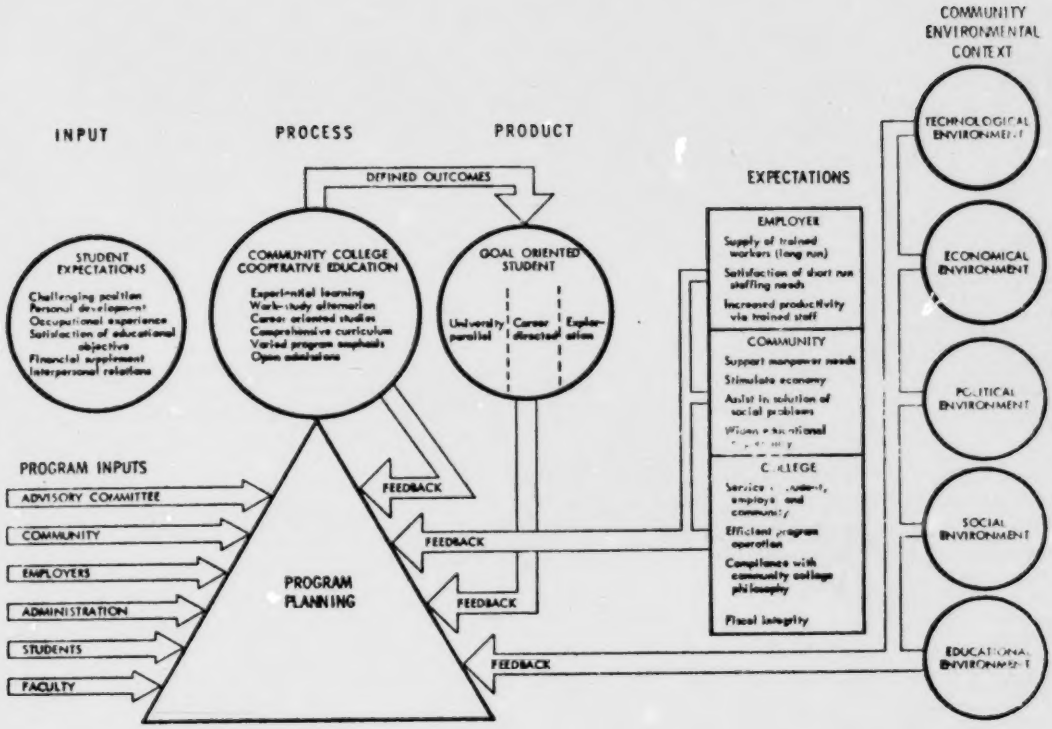


Figure 3

Community College Cooperative Education
Evaluative Planning Model

business and industry expend considerable effort at design and implementation, surely that same interest can be brought to bear in the evaluative efforts; for if we are to become accountable for the program elements within our design, some feedback information of specific nature would prove invaluable. Ed.)

SUMMARY

Based on the related studies and literature presented in this section, the key issues and concerns involving cooperative education programs appears to simplify down to identifying appropriate policy and procedures for administrative organizational relationships, a work/study plan, criteria for determining academic credit, nature and function of the advisory council, criteria for selecting the work station, appropriate public relations procedures, determination of need, objectives and content for program, role and function of program coordinator, selection and orientation of student, appropriate evaluation procedures, necessary equipment and facilities, institutional policies and written agreements, financing and costs, and planning, coordination and orientation of staff prior to implementation.

Several sources were invaluable in the attempt to summarize and synthesize the major elements of research and literature concerning cooperative work education. These sources could be acquired for permanent additions to the professional library where administrators, teacher-coordinators, the employment community as represented by various advisory councils, and of course the student/trainee could have ready access. These five sources were fundamental.

1. Barry Heermann, Cooperative Education in Community Colleges. San Francisco: Jossey-Bass Publishers, 1973.

2. Harold R. Wallace, Review and Synthesis of Research on Cooperative Vocational Education. Columbus, Ohio: Center for Vocational and Technical Education, 1970.

3. James Smiley and Wesley Budke, Post-Secondary Cooperative Education Abstracts. Los Angeles, California: ERIC Clearinghouse on Junior Colleges, 1973.

4. Asa S. Knowles and Associates, Handbook of Cooperative Education. San Francisco: Jossey-Bass Publishers, 1971.

5. A Guide for Cooperative Vocational Education. Minneapolis, Minnesota: College of Education, Division of Vocational and Technical Education, University of Minnesota, 1969.

CHAPTER III

ON-SITE VISITS TO SELECTED TECHNICAL COMMUNITY COLLEGES

The purpose of the on-site visits to various Technical Community College campuses was to ascertain the degree of use and obtain an appraisal of the effectiveness of the instructional strategy known as cooperative education. Consequently, program data relative to organization, funding, staffing, financing, enrollment and evaluation were gathered.

The following Nebraska institutions were visited:

1. Western Nebraska Technical Community College Area.
   a. Nebraska Western College, Scottsbluff
   b. Western Nebraska Technical College, Sidney

2. Mid-Plains Nebraska Technical Community College Area.
   a. North Platte Community College, North Platte
   b. McCook Community College, McCook
   c. Mid-Plains Vocational-Technical College, North Platte

3. Central Nebraska Technical Community College Area.
   a. Central Technical Community College, Hastings
   b. Platte Technical Community College, Columbus

4. Northeast Nebraska Technical Community College Area.
   a. Northeast Nebraska Technical Community College, Norfolk

5. Southeastern Nebraska Technical Community College Area.
   a. Southeastern Nebraska Technical Community College, Milford
   b. Southeastern Nebraska Technical Community College, Fairbury
   c. Southeastern Nebraska Technical Community College, Lincoln

6. University of Nebraska School of Technical Agriculture, Curtis.

In addition, one college, the Johnson County Community College, Kansas, was identified as an institution in a neighboring state with commendable cooperative education programs. On the premise that the

experience with co-op programs of institutions in an adjacent state would provide additional insight, this on-site visit was included.

For purposes of this section, the definition of cooperative education utilized was that which is usually associated with programs supported by funds authorized by the 1968 Vocational Education Amendments. Essentially, cooperative education programs, then, were programs which combined classroom instruction with a series of on-the-job learning experiences. The on-the-job experience can occur during the same time as classroom activity (parallel program) or it may follow or be a classroom, on-the-job, classroom sequence (alternate program). As far as post-secondary funded programs were concerned, payment of services for work performed was a critical element presumably to assure a greater degree of relevancy for the work-learning experience.

During the 1973-74 academic year there were a total of seventeen post-secondary cooperative education programs operating in the State of Nebraska funded under Part G of the 1968 Vocational Education Amendments. The programs included were three programs in distributive education, two in office education, two in agriculture and ten in trades and industry. A total of 71 teacher-coordinators involved were with a total enrollment of 222 students.

The sections that follow include descriptions of these existing cooperative education programs and a summary.

A REVIEW OF SELECTED COOPERATIVE EDUCATION PROGRAMS

Nebraska Western College, Scottsbluff

There were several cooperative programs in operation at Nebraska Western College. The primary responsibility for each cooperative program was delegated to the teacher-coordinator. Outside funds in the nature of grants were available to augment regular college resources for these programs (Cooperative Education, Part G monies, as well as an NIMH grant). An example of a teacher-coordinator assignment (business-office practice) would involve teaching two classes and being responsible for the cooperative education programs including a classroom component as well as all other aspects of coordination of the program. No special campus physical facilities and/or equipment were made available merely because these were cooperative programs but in a sense each participant student was exposed to a much greater and richer array of equipment and/or physical setting because of the on-the-job feature.

Except for the records deemed essential to comply with grants, no special record keeping or separate accounting was made.

Each of the cooperative programs was a separate, discrete operation and thus it was not surprising to find that each coordinator-teacher in each Part G funded program had obviously independently developed the program for which he was responsible in conformance with the Cooperative Education Guidelines for Section B and G of the Vocational Amendments of 1968. Variation from program to program is appropriate and logical when one considers the differences between fields such as large farm or ranch operations, a business office or the production agriculture program and the mental health worker program.

College administrators and teacher coordinators were asked to make an evaluation of the strengths and/or weaknesses of the program. One response, and probably a sound one, was that the program was too new to make a sound judgment. Student problems such as personality shortcomings or mismatch with on-the-job supervisor, lack of skill, lack of interest in class portion of the program were mentioned as problems. On the other hand, teacher-coordinators were generally enthusiastic with respect to the promise of the program.

The following table includes a listing of cooperative education programs (those funded under Part G of the Vocational Amendments of 1968) as well as other programs which make use of a combination of on-the-job and classroom experience at Nebraska Western.

ENROLLMENT IN CERTAIN COOPERATIVE EDUCATION-TYPE PROGRAMS AT NEBRASKA WESTERN COLLEGE 1973-74

Program	Enrollment*
Production Agriculture	16
Business Office Practices	25
Management Practices	15
Mental Health Worker	40

*Enrollment indicated is total enrollment for both semesters and should be considered an approximation. For example, a dropout rate of 25 percent is a built-in feature of one program.

Western Nebraska Technical College, Sidney

At one time a mid-management cooperative education program had been offered at Western Nebraska Technical College. This program had been supported by a Part G grant. This year the college was not operating any cooperative education programs supported by Part G grants.

One can speculate relative to problems that might be encountered in operation of a cooperative education program at Western Nebraska Technical College. Among them certainly would be the fact that the population base (and consequently the potential number of training stations within a 25-mile distance from the college) was small. Until recently, this campus was geared to providing certain highly specialized programs related to state and regional rather than community needs. It is understandable, therefore, if the number of readily accessible work stations was not great for several of its best developed programs.

Southeastern Nebraska Technical Community College, Milford

It was reported that the college at Milford had operated cooperative education programs in the past but was not operating any such programs now.

Many of the most highly developed programs at Milford were in the technical category and somewhat like Nebraska Western Technical College not necessarily from the area. Students seek out the school and many are undoubtedly highly motivated. Graduates are placed throughout the region. Cooperative programs, as an instructional strategy, has not seemed to have had much appeal at Milford.

Southeastern Nebraska Technical Community College, Fairbury

Ten students were enrolled in two cooperative education programs, distributive education (management) and office education. The programs were relatively new--just a little over one year old. Each program had experienced dropouts. At least two of the participants had not been placed in full-time jobs to date--it was suggested that sub-par performance by these participants may have been a factor.

Each program was operated by a teacher-coordinator. Each of the two teacher-coordinators was teaching several classes (as many as five) as well as serving as a teacher-coordinator of a co-op program. Each of the teacher-coordinators had extensive practical job experience.

The cooperative-education stations were secured by the teacher-coordinator. Most students came from the Fairbury area. Work stations were primarily centered in or near Fairbury. Students were screened before being enrolled in the co-op program. Though the criteria for selection were not explicitly identified, factors such as initiative, industry, and good skill development were mentioned.

The co-op programs were heavily dependent on general budget support with an assist in the form of Part G monies. No special accounting or record keeping other than as required in connection with the Part G grant was identified. In general, physical facilities and general library facilities were not plush or elaborate. The array of instructional equipment available for the office education was limited.

While the programs may be so new as to cause valid assessment to be difficult, in each program student and employer evaluations were

sought. It was reported that officials providing training stations continued to request that co-op students be placed in these stations.

Central Technical Community College, Hastings

Central Tech had no cooperative education program in the traditional sense. Philosophically, their instruction program was designed to avoid certain weaknesses of knowledge acquisition and evaluation inherent in cooperative education programs. However, they were seriously considering going into a few selected fields with cooperative education offerings. Program offerings being considered were in areas where the expensive equipment needed made it impractical for purchase by Central Tech.

Currently, all of the programs at Central Technical Community College were based upon the following three phases in sequential order.

1. Knowledge base acquisition (cognition)
2. Clinical activities (simulation)
3. Work experience (internship).

Instruction philosophy at Central Tech was that the knowledge base must be acquired first, and was best done in classrooms and through testing. Once cognition was adequate, clinical activities were used to reinforce cognition and was evaluated by specialist instructors. The third step was the work experience of three months in local area businesses and industry for which the field supervisor was given a statement of activities and performance criteria for guidance in the supervisory role. At the conclusion of the work experience, the school received a subjective judgment from the field supervisor as to whether

and how well the student performed in each category suggested in the original guide. In addition, a subjective judgment was obtained about subject knowledge possessed by the student. Finally, the field supervisor submitted a statement to the school about behavior modification needed by the student.

Central Tech officials have avoided the usual cooperative education program because of what they perceive to be the following weakness or problems inherent in them.

1. Field sponsors frequently have little commitment to the education of the student--only production.
2. There was an insufficient number of local businesses to accommodate all the students in the school.

School officials believed their program to be consistent with their instruction models and theories. Demand for graduates of the school far exceeded the number of students available.

School of Technical Agriculture, Curtis

The Curtis School of Technical Agriculture is an official part of the resident instruction program of the University of Nebraska. The programs of instruction covered a total of 21 months.

The school had six cooperative education programs (as modified to post-secondary and approved by the Veterans Administration) with a total current enrollment in those programs of 134 students. The programs and enrollments were broken down as follows:

Production Ag	43
Ag Business	13
Ag Machinery Mechanics	28
Commercial Horticulture	15
Ag Land and Water	10
Veterinary Tech	25
	134

Actually, they called the activity a work experience quarter (three months) which in fact worked much like the internship concept in practice at Central Tech of Hastings. Each student was visited at least once per quarter at his job location by the Curtis teaching staff specialist.

Supervision of the work experience was strenuous because the students were placed with employers throughout Nebraska. This made supervision visits time consuming because of the travel involved.

The on-the-job supervisors had evaluation forms for assessing student progress, strengths and weaknesses. Some feedback about the role and program of CSTVA was acquired through these forms and informal communications.

The program appeared to work very well and was effective. Field sponsor evaluations were positive and helpful.

The problems perceived by the school staff were:

1. Inadequate numbers of businesses in the area to service students--thus, generating the statewide placement pattern.
2. The lack of time, partially due to student dispersal, to have lengthier and more frequent visits by the supervisor(s).
3. The uncertainty of funding. There was some federal funding, but they never knew when it was to come or how much. The federal funds were disbursed to them through the Nebraska State Department of Education.

Platte Technical Community College, Columbus

Cooperative education was viewed as a promising instructional strategy by the college administration. Twelve students were in the cooperative education internships; also, twelve were participating in the seminar phase. Co-op students participated in the seminar either before, during, or after the internship phase. The immediate goal was to involve at least an enrollment of forty for the summer session. Plans were to offer most of the internships during the summer when teacher-coordinators could more easily be freed to supervise the co-op students.

The college faculty was being re-organized into three groups or clusters; namely, business-industrial, creative-social, and science-health. It was not clear at this time how this change would affect the co-op programs.

Except for grants available for co-op programs that qualify, the co-op programs' support came from the general college resources. Since becoming a part of the NTCC system, a portion of the support (about 51 percent) came from the state. Some freedom and flexibility at the college level had been surrendered. Thus, modifications or adjustments of program may not be accomplished as easily as once was the case.

Currently there were arrangements for co-op programs in accounting, secretarial science, data processing, mid-management, advertising, drafting, agri-business, automotive technology, welding, machine shop, supermarket management, production management, home economics, journalism, manufacturing technology and business administration. There were eight teacher-coordinators. A dean (of cooperative programs)

served as a college coordinator of cooperative education programs. There were interns in six programs.

It was proposed that four teacher-coordinators be utilized during the summer for an anticipated group of forty enrollees. Teacher-coordinators were expected to visit on-the-job students as their teaching schedule permitted. Some of the teacher-coordinators felt more time needed to be made available to properly perform the task of teacher-coordinator in a co-op program.

The Platte Technical Community College was operating in relatively new plant facilities. Though space for some of the business-industrial programs was limited, for the most part the facilities were excellent.

Each co-op intern was evaluated monthly by each employer. Guides were provided for the direction of the employer in making the evaluation. Evaluative comments as follows were made by administrators and/or faculty:

1. The staff (faculty) time requirement for teacher-coordinators is extensive.
2. The identification of stations and supervisors who take the task of providing a good co-op program is difficult.
3. Recruiting the "right" kind of students in reasonable numbers to constitute a class group is not easy.
4. The employers, employees, as well as the college teachers need in-service training.
5. The faculty generally was not positive with respect to co-op programs.

6. The department heads were in agreement that the program was creating good will in the community.

Northeast Technical College, Norfolk

Five instructor-coordinators were responsible for the co-op programs being offered at Northeast. According to school officials, all of the staff had a high level of enthusiasm for cooperative education.

Each instructor-coordinator was primarily responsible for one co-op program--securing work stations, supervising students, and teaching the on-campus seminar.

Successful completion of an on-the-job assignment was a requirement for graduation in six areas; namely, electric utility lineman, radio and television service, electrical (residential and commercial), farm and ranch operation, automotive service center mechanics, and accounting and secretarial programs. The on-the-job segment was structured in one of the following five ways:

1. One year in the classroom and twelve weeks work experience.
2. Two years in the classroom and twelve weeks work experience.
3. Three to four weeks in the classroom and the remainder of the program on the job (this was true only of accounting and secretarial).
4. Two years in the classroom and eighteen weeks of on-the-job experience. This was true only of the farm and ranch operation program which was built around the seasons and not the school year.
5. One year in the classroom and one four-week period of work experience in August and an eight-week period in April and May.

Students in the electrical utility lineman program were assigned to work stations all over Nebraska. This made it necessary for the instructor-coordinator to travel statewide to supervise students.

Most of the instructional space available to the college was relatively new; most programs enjoyed adequate classroom space reasonably well equipped. If programs were to be extensively expanded, additional facilities would be required.

Northeastern, like all of the technical community colleges, in securing money through the State Board of Education was finding that some of the independence and flexibility of operation once enjoyed was partially lost. Though small federal grants were available, the chore of doing the required paperwork made the value of these grants questionable.

The usual forms (for on-the-job supervisors) were used. The student could choose to accept the traditional letter grade or a "satisfactory-unsatisfactory" marking.

The co-op programs were perceived as highly effective by administrators and instructors. Some of the comments reflecting the positive aspects of co-op programs were:

1. The co-op student is highly respected by employees.
2. We have several instructors anxious to have a chance to be an instructor-coordinator.
3. Co-op programs make recruitment of students an easier task for those fields.

The community in which the college was located was attracting a number of new industries. Though probably too early to accurately

evaluate the situation, there was some evidence to indicate that with the coming of new industries the salary structure was changing resulting in less stability among trained skilled craftsmen.

Mid-Plains Nebraska Technical Community Colleges

Mid-Plains Nebraska Technical College offers twelve cooperative education programs including three where the students receive no pay for their work experience. The cooperative education programs include three in the Health Occupations area including one in Office Occupations, and eight in Trades and Industry. For a more detailed description of these programs see Appendix B. McCook Junior offers no cooperative education programs and North Platte Junior College offers two programs. These programs are in Distributive Education and Secretarial Science.

In addition, Appendix B presents data concerning the vocational-technical program offerings in the Mid-Plains Nebraska Technical Community College area. These data indicate that the Mid-Plains Nebraska Technical College offers the most comprehensive array of vocational-technical programs with a major emphasis in the areas of Health Occupations, Office Occupations, Technical, and Trades and Industry. The McCook Junior College and the North Platte Junior College both offer more limited programs with the McCook Junior College providing offerings in some areas of Agriculture, Home Economics, Office Occupations, Technical, and Trades and Industry, and the North Platte Junior College providing offerings in some areas of Distribution and Marketing, Home Economics, and Office Occupations.

Johnson County Community College, Kansas

In attempting to identify successful and effective cooperative education programs in neighboring states, the programs at Johnson County Community College were identified as outstanding.

The co-op programs being provided at the Johnson County Community College were in the area of business and management. Co-op programs provided were in marketing and management, fashion merchandising, secretarial careers, journalism, data processing, and hospitality management. There were potentially numerous on-the-job stations in the greater Kansas City area and numerous employment opportunities.

Essentially, each program was the responsibility of the assigned teacher-coordinator who was relatively free to modify program elements as seen desirable in a particular program. In general, all the co-op programs paralleled classroom instruction and in the two-year programs the student was required to acquire an on-the-job station when he enrolled in the program. In general, an on-the-job assignment which averaged fifteen hours per week was required. The Director of the Business and Management Program as well as the Assistant Dean of Instruction were highly supportive of the cooperative education programs as were the teacher-coordinators. All individuals involved were in agreement that the advisory committees were essential and, in fact, very valuable.

Each teacher-coordinator was responsible for a teaching load similar to that of all other instructors; a formula was used to

ascertain the load equivalent of co-op students. Each co-op student required individual attention for planning a training program and a minimum of four visits per semester. If a business establishment had only a single co-op program, the time required for supervision of a given number of students required more travel and a greater expenditure of time than where several co-op students had an assignment in one business establishment.

The number of students served by one teacher-coordinator varied, but the marketing management programs with forty-three co-op students and fashion merchandising with thirty-eight were popular programs.

With respect to the matter of federal grants, as well as the Part G support, officials voiced the opinion that the required recordkeeping to qualify for grants may well offset any apparent financial advantage. Other than as required as the result of grants, no separate or different recordkeeping or budgeting was required. Teacher-coordinators were reimbursed at the rate of ten cents per mile. Teacher-coordinator contracts were for one extra month per academic year.

Training agreements and evaluation forms had been developed for each program. In general, these were the standard forms frequently found used in connection with co-op programs appropriately modified to better serve the specific program and the college environment.

The coordinator of career education and others associated with the program viewed the teacher-coordinator as the key--all other factors

being favorable, the co-op program would be effective if an able, enthusiastic teacher-coordinator were identified with the program. It was felt that effective co-op programs were valuable in recruiting the more able students. Effective co-op programs were an excellent public relations device. All were adamant in insisting that neither the grants available under Part G of the Vocational Amendments of 1968 nor any federal grant should be permitted to entice an institution to undertake a program--a co-op program should be undertaken on its merits alone and with full expectation to provide the essential logistic support.

SUMMARY OF OBSERVATIONS FROM ON-SITE VISITS

Given the proper set of factors, cooperative education programs can be very effective and satisfying; improperly staffed, improperly supported or lacking adequate business-industry support (on-the-job stations, etc.) or other unfavorable factors, cooperative education programs are no panacea. Some of the key factors as identified by personnel at one or more institutions, not necessarily in order of importance of significance, were:

1. Survey of need. Is there a demand for graduates? Manpower studies are useful but such surveys may not be as reliable as is desired. In metropolitan areas, a study of want ads for personnel may be of value in offering a clue to manpower needs.
2. Support of business and industry. An advisory committee is essential. Also, an adequate number of on-the-job stations

with supervisors willing to become involved in providing an appropriate learning experience is a must.

3. Personnel. An able, enthusiastic teacher-coordinator may be the most important single factor once the decision is made to become involved in a cooperative education program. The coordinator should possess industrial experience. Many of the tasks performed by the teacher-coordinator can be done more effectively by a person who has had actual, successful experience. However, the teacher-coordinator must be able to communicate effectively with his campus colleagues. It can be reported that on-site visits suggested that development of effective cooperative education programs with a reluctant teacher-coordinator was very difficult--the teacher-coordinator has to want to make the program work.

4. Facilities and equipment. Even meager on-campus facilities and equipment did not seem to adversely affect cooperative education programs. In fact, at one college (Johnson County Community College), it was suggested that its parallel co-op education programs permitted the college to maximize the use of physical facilities. Several others suggested that through co-op programs, it might be possible to provide certain education training programs without the purchase of certain very expensive equipment since presumably the student would secure "hands on" experience while on the job.

5. Financial support. On a per student basis the total instructional cost is slightly greater than the average per student

cost for all on-campus programs. In no case was there a separate, discrete budget provided (different and apart from other programs). In no case were separate records maintained other than those required in connection with some grant.

6. Cooperative agreement forms. Cooperative agreement forms were universally utilized. Cooperative agreement forms were required in Part G grant supported programs. They aided in establishing what was expected from the training station. While in many respects, the cooperative agreement forms were quite similar, local and program modifications were the rule.
7. Evaluation. Virtually all programs utilize some method of securing an appraisal of the co-op student by the station supervisor. The variation among forms used was great--from very complex to quite simple. These forms tended to touch on such factors as attitudes, interest, and personal traits as well as job-related skills. The student was required to submit reports on several factors in many programs. The teacher-coordinator form used frequently paralleled the on-the-job supervisor appraisal form.
8. General comments. Effective, successful cooperative education programs were good for the college; while probably not intended as a public relations devise, successful programs help secure community support for the college; they aided in recruiting good students; they served to stimulate students to do good work. Graduates of successful cooperative education programs secured jobs easily. It was virtually impossible to launch a

co-op program without the understanding, the confidence, and the support of key people in business and in industry. It was very difficult to launch an effective co-op program without a qualified, able and enthusiastic teacher-coordinator.

CHAPTER IV

"BEST PRACTICES" IN EXEMPLARY CO-OP PROGRAMS IN SELECTED TWO-YEAR COLLEGES IN OTHER STATES

The purpose of the survey of exemplary co-op programs in other institutions was to identify what some of the cooperative education program directors in these institutions perceived to be "best practice" for the two-year college. A copy of the survey instrument utilized in this phase of the study is included in Appendix C. The following institutions were surveyed:

1. Lane Community College, Eugene, Oregon
2. College of Alameda, Alameda, California
3. LaGuardia Community College, Long Island City
4. Miami-Dade Community College, Miami, Florida
5. Merritt College, Oakland, California
6. Broward Community College, Fort Lauderdale, Florida
7. W. W. Holding Technical Institute, Raleigh, North Carolina
8. Cincinnati Technical College, Cincinnati, Ohio
9. Cumberland College, Lebanon, Tennessee
10. Los Angeles Trade Technical College, Los Ageneles, California.

Based on the key issues and concerns identified in the related studies and literature section, a questionnaire was developed to assess "best practices" in exemplary two-year college co-op education programs. Selected colleges contacted were those listed in the Handbook of Cooperative Education in the discussion on exemplary programs in

two-year colleges and those that participated in the recent Tenth International Conference for Cooperative Education.

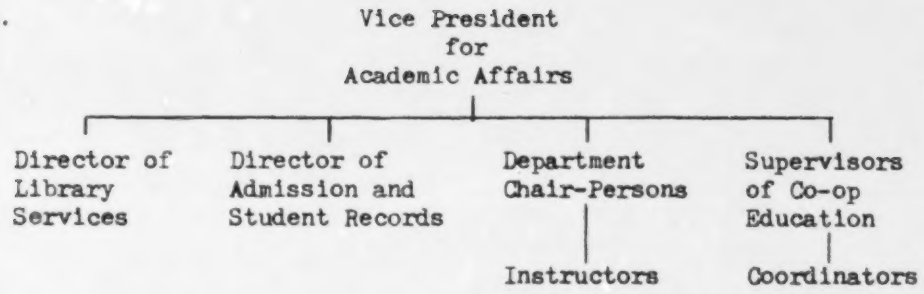
Fifteen questions appeared on the questionnaires which were sent to the cooperative education program coordinators. These questions represented the key questions concerning the operation of co-op programs and issues of importance in consideration of implementation of the co-op program into the instructional sequence. Each of these questions is given; the responses reported; and brief comments provided as a summary of the question.

1. Organizational chart. Administrative organizational relationship of program coordinator to (a) Dean of Faculty, (b) Dean of Student Services, and (c) Divisional Chairman.

   Responses

   a. Program coordinator should report to Dean of Instruction. This strengthens the academic status of co-op education.
   b. Report to Dean of Faculty to prevent credit granting difficulties. However, would consider Dean of Student Services if necessary to combine co-op with student placement.
   c. Program coordinator is responsible to Dean of Students who is responsible to President of Institute.
   d. The program coordinator reports to the Dean of Instructional Education.

e.



f. Part-time instructor coordinators are responsible to a coordinator of co-op education who is responsible to the Dean of Instruction.

g. Dean of Co-op Education responsible to Dean of College who is responsible to President.

h. Co-op coordinator is responsible to a Chairwoman of Career Development who reports to a Director of the Division of Student Development who then reports to Dean of Student Affairs.

i. Coordinator of Cooperative and Occupational Education is on the staff of the Dean of Instruction.

Summary. The general concensus was that the Dean of Instruction should be ultimately responsible to ensure the academic status of co-op education. Depending on the size of the institution, the program coordinator may report directly to the Dean of Instruction or report to a Dean or Supervisor of co-op education, who then could report to the Dean of Instruction. The supervisors of co-op education may be the department chairpersons or may be separate positions, again depending on the size of the co-op program.

2. Work/Study Plan. (e.g. alternate semester, parallel half-day, evening, . . .)

Responses.

a. All options should be open. Provide whatever suits your students and your employers.

b. Alternate quarter system. Associate degree programs require two three-month work sessions and eighteen months of class.

c. Our college offers three choices: the alternate semester; the parallel half-day; and the evening program, depending upon which vocational or college transfer program is involved in the cooperative education project. Most of our students attend school in the half-day sessions and then work in the field for the remainder of the day; but we also have a large percentage of our students working full-time and taking classes at night. There are also a few students that are working in the alternative semester plan.

d. Alternate quarter (95% of students). Half-day (5% of students).

e. Alternate semester for all students--with the exception of Human Services program--which is: alternate days.

f. All types: alternate, two terms in a row, and parallel half-day.

g. Our cooperative education program includes two types of work experience: (i) the supervised part-time employment of students. This experience will provide the opportunity to counsel students in work habits and attitudes in real life work situations. The work situation need not be related to the

student's educational and/or occupational goal; and (ii) the supervised job related to the major. This phase of the field experience provides the student with the opportunity of extending his college academic major through the world of work. We use all types of work/study plans. In the parallel plan, it is expected that the student would spend one-half day in college classes and the other half-day in the working situation. The hours of work may be flexible; i.e., morning, afternoon, or evening, and may be 5 to 30 or more hours per week. The class load may also vary, however, students would be expected to carry 10 to 14 units in addition to the work experience activity. In the alternate quarter arrangement, students are provided the opportunity to spend a full quarter in college and the following quarter on the job. Two students may hold one full-time work station. While one is in college, the other is working. Typically, the student can finish an Associate in Arts two-year degree in two and one-half years if the student also takes a few evening classes and gets a small amount of work experience credit. In the extended day work-study program, students attend evening college while employed during the daytime.

Summary. Most of the institutions surveyed offered all three options (parallel alternate semester, half-day and evening) and seemed to recommend that all options be made available. If there was one plan offered more often than the others, it would have to be the alternate semester or quarter plan.

3. Academic Credit. (If yes, criteria to determine amount of credit given; assignments, final reports, . . . to supplement work experience.)

Responses.

a. The jobs and educational plans must be approved by a college work experience supervisor. Student must have completed 8 semester units of college work or its equivalent prior to the semester in which the student enrolls in work experience. In a given semester, the student must carry a total of at least 8 semester units. This total can include Work Experience units. The number of units earned each semester will be determined at the end of the semester and will be based on the average number of hours worked per week (one unit for every five hours a week). For students whose jobs are not directly related to their area of study, there is a limit of 3 units per semester, and an overall limit of 6 units toward graduation. For students whose jobs are related to their field of study, there is a limit of 4 units per semester and an overall limit of 16 units toward graduation. Seminar meetings, on-the-job visits and student and employer evaluation reports are required.

b. Yes, between 5 and 10 hours of work per semester hour depending on local custom. Flexibility advised. Student report should be such as to require student to recall, organize and place in perspective, his experiences.

c. Yes; four quarters academic credit; based on work report by students, employer education, and coordinator's appraisal of work experience.

d. Yes, employee education.

e. Units may be used for lab or shop credits. Departmental jurisdiction.

f. Our college gives both transfer and vocational credits. Credits are based upon the number of hours the student is working in the field per credit. Normally, the basis of credit is 36 hours of work per term equals one college credit, but in most offerings of cooperative education, we request students to attend a one hour per week seminar held either on campus or at local businesses. Plus, several of our college classes require outside assignments, a daily log in certain cases, and a notebook or a summary of the work experience during the term.

g. Yes, 40 hours of work per term or two 20 hours/week terms for 3 credits. Plus seminar (2-4 meetings), term paper and employer evaluation.

h. Yes, criteria include: the grade from a concurrent seminar, a term report, performance on the internship site, and achievement of prior agreed-upon educational objectives.

i. For work station not related to student's goal, no more than three credit hours per semester with a maximum of six toward graduation. For work station related to student's goal, no more than four credit hours per semester with a maximum of sixteen toward graduation.

Summary. In all cases academic credit was given. The number of hours varied, depending on the number of hours worked. Typically

the student could get up to three or four hours per semester, if the job was related to his occupational goal with a maximum of sixteen hours toward graduation. The student would typically be expected to attend a seminar one hour per week, keep a log of the work experience, write a term report and there would be an assessment of the student performance on the internship site.

4. Advisory Council. (Number, make-up, functions).

Responses.

a. None.

b. Form only as needed. Helpful in evaluating work stations particularily in technical areas. Avoid over-committing your time.

c. Cooperative work education does not have a particular advisory committee by itself, each of the vocational programs at our college has its own advisory committee and from this feedback, the college is able to determine what the advisory council would like to have in the way of cooperative education for their departments. Our college has 44 educational advisory committees.

d. All occupational areas. Twenty to twenty-five members. Advice on operation of total program.

e. We have one for each degree program (23 in all).

f. Cumbersome. Discarded. Deal directly with faculty necessary and attend occupational division meetings.

g. None.

Summary. The use of advisory councils varied considerably. About half the institutions surveyed indicated that they did not use nor did they favor the use of advisory committees. The other institutions typically indicated the use of multiple advisory committees, one for each vocational and/or occupational area.

5. Work Station. (Criteria for selection).

Responses.

a. The criteria for selection of a work station varies, however, our stations must offer training that relates directly towards a student's college preparation on the campus.

b. Appropriateness of the experience with regard to the student's educational and career goals.

c. Must be related to academic major, have growth potential, provide for a variety of tasks, and have close association with practitioners in student's eventual field.

d. Work experience must relate to student's career choice as indicated by the curriculum in which he is enrolled.

e. Must have relationship to academic major and/or long-range career goals. Have opportunity for new learning experiences each work period.

f. Have visitations and signed agreements with employer.

g. Relevance to technology; interested in student welfare and proximity.

h. Career related; work must be meaningful; paid salary; and no a relative's work station.

i. It should not be inferred that only large employers can offer a meaningful training program. Some small companies have operated excellent programs with a variety of experiences for their cooperative student. By the same token, some large companies provide only limited experience. In actual fact, the value of the program to the student bears little relationship to the size of the employing firm, but rather depends on the attitude of the employer toward the education of the student.

Summary. The main criteria seemed to be that the work station offer an experience that relates directly toward the student's education and career goals, that the employer be interested in the student's growth, that the work station provides a variety of learning experiences and that the student receive a paid salary.

6. Public Relations. (e.g. breakfast with employers, appreciation dinners, . . .)

Responses.

a. Informal one to one breakfast with employers. Formal, yearly, appreciation dinner to hand out certificates of appreciation.

b. For public relations our particular co-op office sends out periodic newsletters to employers and students; also we have brochures that are mailed out to different employers. Our staff has developed a film entitled, "The Benefits Are Obvious," which explains our Cooperative Work Program, plus there are periodic dinners with individual employers funded by our

office, television spots, several newspaper articles which appear in the local paper and in the surrounding smaller town papers; these facets give the public and employers a greater in-site with the Cooperative Work Experience program and the opportunities it has to offer. A certificate of appreciation is given to all our employers and signed by our Board President and College President. Individual letters are sent out by our coordinating staff, and also a field faculty card is issued to our employers which can be carried in a billfold.

c. On-campus meetings as "appreciation;" but also to ask for curriculum input.

d. Advisory breakfast once a year.

e. Annual advisors day. Advisory committees meet during the year.

f. Signs, newsletters, phone calls and visits.

g. No especially designed public relations program has been developed for current employers. The college works with approximately 400 different employers.

Summary. The most common public relations strategies utilized were breakfast with employers, appreciation dinners, a co-op newsletter, certificates, individual letters and brief news releases explaining the cooperative education program.

7. Program and Staffing. (Determination of need; objectives, content, . . ., qualifications of program coordinator and staff).

Responses.

a. Meet with each occupational advisory committee to discuss the merits of program in specific fields. Act on their decision.

b. Coordinators as needed in subject areas--academically, qualified, open to learning from exposure to employers and students. Program director should have broad academic background if possible (not just vocational areas). Also have on and off-campus public relation skills. Need philosophical commitment.

c. The standard rule for student load is 60 students per coordinator on a full-time basis which equals out to four students per college credit.

d. Needs assessed by administration of Institute.

e. Need and objectives determine program coordinator's qualifications. Should have combination of education and business/industrial background. Program coordinator determines content.

f. The following are the objectives of the Cooperative Education program:

- Develop increased knowledge and skills in the major field of study.
- Explore different career possibilities.
- Attain experiences which will promote education as well as personal growth.
- Develop an understanding of the world of work.

As the college is mandatory, Cooperative Education in all program areas, the faculty in Cooperative Education (all of whom are full-time in the Cooperative Education Division), are selected based on their expertise in the various disciplines offered in the institution, together with appropriate work experience.

g. Purpose of co-op program is to assist students in gaining career-related work, an "experiential" education, applying theory to practice; to help student discover if he is in the correct career field and what additional course work might be needed; to help the student in securing permanent employment in his major; to provide a permanent record of having worked in chosen career field and an evaluation of that work; to assist students in developing maturity and human relations skills; to assist students in graduating by given them 3 credits for each work term; to provide motivation to complete degrees through knowledge of job requirements and issuing co-op certificate; and, to provide financial support.

Summary. The answers to this question were varied. Most of the answers focused more on the objectives and goals of cooperative education program rather than how to determine program need. Precise qualifications of the program coordinator were not elicited as the result of the question. In summary, the question was probably too broadly stated.

8. Coordinator Function. (e.g., assessing student needs, selection of job sites, . . .).

Responses.

a. Our coordinators have four particular job responsibilities; (1) locating trained transfer students; (2) selecting and placing the correct student at the correct working site for training; (3) supervising the students at the job site; (4) doing an evaluation of the students.

b. Recruit students, recruit employers, evaluate work stations, arrange interviews and follow-up, visit students and employers at work site, grade papers and grade students.

c. Liaison with employers and students, conduct student seminars and job development.

d. Recruitment of job stations, matching students to job, obtain progress report from supervisor, assign grade for semester.

e. Structuring the educational experience of students from the internship, developing appropriate internships, visitations and trouble-shooting, preparing students for the experience, evaluating and grading the experience, developing and maintaining communication ties with the instructional division.

f. Publicity, interviewing, selection, handle all assignments, create and/or approve positions, run seminar, handle job/student problems.

g. General Responsibility:

The Cooperative Work Experience Coordinator is responsible to the Director of Special Training Programs and is responsible for identifying, planning, developing, and presenting a cooperative work experience program for the Community College that will encompass all educational departments within the campus.

Responsibilities and Duties:

(1) Assist in planning a work experience curriculum for each participating department.

(2) Plan and direct coordination with local business, government agencies, and other organizations.

(3) Assist department coordinators by making periodic visits to organizations where students are working.

(4) Assist department coordinators in developing a training program for students enrolled in the program.

(5) Maintain a business-like relationship with employers, college staff, and students.

(6) Within the limits of his authority, carry out all administrative matters necessary for smooth operation of the program.

(7) Provide for periodic analysis, evaluation, and reporting of the work experience program.

(8) Be responsible for hiring and evaluation of staff located under his jurisdiction.

(9) Act as liaison between all department heads at the Community College in developing and operating a productive program.

(10) Work with each department head in hiring and training personnel for contact, supervision, and coordination within each department.

(11) Work with advisory committees in making cooperative work experience a meaningful program for the Community College.

(12) Keep informed about cooperative work experience by traveling to meetings, and conventions throughout the nation and joining related organizations.

(13) Act as the Community College contact person for development of new cooperative work experience programs within the campus.

(14) Establish and see to it a budget is adhered to.

(15) Select, counsel, and place students in work sites that match both the students' needs and the employers' qualifications.

(16) Supervise students on a regular basis and keep records of students and employer contact during supervisory visits.

h. The coordinator normally spends at least 75% of his working schedule in coordination and no more than 25% in classroom instruction. Normally, he will be assigned coordination duties relating to more than one associate degree program.

(1) Participates in the departmental effort to recruit students.

(2) Admits students to programs (employing transcripts, entrance test results, and personal interviews to make admissions decisions).

(3) Serves as proctor of entrance tests.

(4) Develops cooperative employment positions appropriate to the philosophy of the College, the staffing or training needs of the employer, and the career education--work experience needs of the student.

(5) Works with the employer to develop appropriate training plans for jobs.

(6) Refers students to employers for placement interviews, matching the personal qualities, aptitudes, interests, and career aspirations of the student with the requirements and career potential of the program.

(7) Makes regular coordination visits to co-ops and/or their employers.

(8) Maintains the required records of his coordination work and provides the required relevant reports.

(9) Receives a tentative annual assignment of his coordination duties on a term-by-term basis.

(10) Establishes annual goals relevant to his coordination duties and consistent with the long-range objectives of his department and of the College.

(11) Performs writing and speaking public relations assignments.

(12) Keeps abreast of developments in rel[illegible]ology areas, technical education and cooper[illegible]cation, and maintains active memberships in appropriate professional and community service organizations.

(13) Assists in the registration process.

(14) Performs other duties as assigned.

(15) Normally teaches one contact hour daily.

(16) Maintains required student records.

(17) Provides required reports.

(18) Assumes other responsibilities as assigned.

i. Each Supervisor of Cooperative Education supervises the cooperative education function within his department and serves

as a member of the Cooperative Education Council. Duties include up to ten hours of teaching per week.

(1) Assists in planning, implementing and evaluating the general institutional effort in student recruitment.

(2) Supervises the department-level student recruitment effort.

(3) Produces or assists in production of printed and visual promotional materials related to the department he serves.

(4) Contributes to the establishment of policies and procedures governing the total student recruitment effort.

(5) Plans and helps to man exhibits.

(6) Supervises job development, placement and coordination at the department level.

(7) Assists in the development of pre-service training programs for new coordinators.

(8) Plans, implements and evaluates in-service training programs for coordinators at the department level, when appropriate.

(9) Helps to plan, implement and evaluate in-service training programs for coordinators at the institutional level.

(10) Assists new coordinators or veteran coordinators requiring assistance in planning, implementing and evaluating strategies for co-op job development.

(11) Provides counsel and assistance in the development of new programs.

(12) Helps to publicize proposed programs.

(13) Assists in the development of the Master Plan for program development.

(14) Serves as a member of the Speaker's Bureau.

(15) Conducts tours of the building.

(16) Assists in development of policies, plans and strategies.

(17) Assumes other responsibilities as assigned.

Summary. Very detailed job descriptions and responsibilities for the program coordinator were provided. In general, the coordinator was responsible for identifying, planning, developing, presenting, supervising and evaluating the cooperative work experience program. He is the primary liaison person with the student, the employer, and the institution.

9. Student. (Selection, orientation, counseling, basic entry skills, . . .).

Responses.

a. All students are required to take cooperative education. Supervision of academic and work experience is the responsibility of coordinators. Prior to their first internship, students must go through a certification process which may include: attendance at required orientation sessions, ability to interview satisfactorily, and appearance for required interviews with the cooperative education coordinator. Students should show evidence of satisfactory academic progress in at least six credits by the end of their first quarter to be placed on internship.

b. Program should be open to all students in good standing. Student must have completed eight semester units of college work, or its equivalent to be eligible.

c. Student must be recommended by occupational instructor.

d. Co-op required of all Associate Degree students.

e. Students can enter into the Cooperative Work Experience program by two different methods: petitioning if they are already employed, or by placement by the co-op office. For placement we have worked very closely with our counselors and also our job skill center where students can go on a computer operation to find out if he has picked the right occupational goal for his future. Orientation of the student to the Cooperative Work Experience program is accomplished by the individual coordinators as they come to the office, by handouts that are given to the students at the time that they come to the office, or when they pick up the orientational forms that are scattered around on campus.

f. Screen in, not out. Devote whatever time is needed to assist student in defining career goal. Counsel regarding applications, interviewing, etc. Keep the program flexible enough to meet the student's needs as far as possible.

g. Admitted to program after entrance exam and interview to determine aptitude for and interest in program. Admitted to co-op program if meets requirements for academic aptitude, maturity and sense of responsibility.

h. Interview all students completing one or more terms with grade point average of 2.0 (C) or better. Cross check with faculty reference. Student should have some career related courses completed with B or better.

1. Participate in orientation conferences in which interests, needs, future plans, and job opportunities are discussed. Have the approval of the cooperative education coordinator to enroll in the work experience education program. Be enrolled in a planned program of community college education.

Summary. The student must be in an approved program, usually having completed a minimum of six to eight credit hours successfully, had an interview with the program coordinator and/or counselor concerning career goals, and have participated in an orientation process usually including the completion of a career related course or attendance at a series of orientation seminars.

10. Evaluation. (Student progress, supervisor of academic and work experience).

Responses.

a. Written evaluation by employer each term. On-site visit each term by coordinator. Evaluation of written report.

b. Our students are evaluated by two different methods: (1) by constant coordination or on the job stations supervised by the coordinators, and (2) by the employer evaluation forms that are sent back by the end of each term. In some cases these evaluations are used as a method of judging the student, especially if the student is quite a distance away from the campus, and constant visitation at the job site is not feasible.

c. Coordinator has final responsibility for co-op counseling and grading.

d. Students and employers submit written reports at the end of each work period.

e. Employer or supervisor rates students on quality of work, quantity of production, work habits, cooperation, and attendance.

f. Completing of seminar requirements. Review of employer evaluation.

g. Supervision of academic and work experience is the responsibility of coordinators.

h. Employer evaluation of student in the general categories of appearance, attendance, attitude, cooperation, dependability, ability to learn, judgment, willingness to work, quality of work, and quantity of work.

Summary. Typically there was both a coordinator and employer evaluation of the student's work experience made. Usually this was done utilizing some type of a standard evaluation form. The categories for evaluation were most often quality and quantity of work, work habits, attitude, cooperation and attendance.

11. Special Equipment, Facilities. (Coordinator's office, classroom furnishings, simulated work stations, . . .).

Responses.

a. Coordinators' offices, administrative offices, material for the cooperative education preparatory course, which includes audio-visual equipment.

b. Tape recorder. (Record meetings so students can make up a missed seminar). Office phone, file cabinet, desk, chairs, and bookshelves. Private room preferred.

c. Not for co-op program per se. All equipment and facilities--within reason--essential for quality technical education.

d. Office, desks, supplies, filing cabinets, and phone.

e. General office equipment--no special equipment used.

f. No special equipment needed.

g. Priority items--separate telephone lines. Access to A.V. equipment for public relations work. Career information library.

h. Each staff member has a telephone, and an office of his own which is close enough so that he can give direct counsel to the students, and of course, he has access to the cooperative work experience secretary. Different students have different facilities which help them in their work situations for an example, our business department has a simulated work station which prepares the student for going out to work. Our body and fender shop has students set up with hourly schedules for working, so that they know how to acquire the speed needed to get a job done before they start to work.

Summary. Overall no special equipment or facilities beyond what is normally provided were seen as necessary to conduct a cooperative education program, although some concern was expressed indicating that the co-op coordinator should have a private office because of number of student interviews which the coordinator needs to conduct.

In terms of facilities for simulated work stations, it is necessary to provide only that which normally would be provided for a quality technical education.

12. Legal, Technical Matters. (Institutional policies, written agreements, legal obligations, . . .).

Responses.

a. The following legal matters are carefully watched by our office: (1) For the person who is doing volunteer labor, the fact that they are covered by Workmen's Compensation funded through our office; (2) that we abide by and help work with the affirmative action for students, faculty and workers; (3) that liability of students while working at the job site; (4) course outline offerings that we adhere to; (5) abide by veteran rules for those students that are on the GI bill; (6) matching the students training with his college career objectives.

b. Students sign co-op agreement to take seminar with job (and will be dropped if unsatisfactory), otherwise, none.

c. Credit granted through co-op department or other departments depending on student needs. Written agreements not legally binding on student.

d. None.

e. Written agreements. No contracts.

f. Student applies for admission to co-op program. Have some institutional policies concerning this.

g. Have a complete set of academic and Cooperative Education Policies. (See Appendix A.)

Summary. There were two programs which had some written agreements on cooperative education. There were no written contracts on cooperative education.

13. Financing, Costs. (Additional/less cost to institution, student, employer).

Responses.

a. Our college cooperative work experience program offerings generate enough FTE to be supported by the state more than to off-set the cost of the program. As for additional cost to employers, we try to always stress the fact that our students should help the employer make money, not cost the employer money. Sometimes this means waiting a period to train the student to see if he would be a good potential candidate for the firm in the future.

b. Overall, our costs of operation are less because we have only about half of our students in school at one time.

c. Students register for co-op based on four quarter-hours of credit. Cost $10 per quarter.

d. Co-op should not be required to pay for itself through student fees. Student fees determined by cost of enrollment in co-op course. No special charge to employer, he pays student a rate determined by himself and student.

e. Unable to furnish.

f. Program generates funds for district based on enrollment for credit.

g. The fees paid by those electing to participate in the cooperative education program help defray the expenses involved in operation of the cooperative education program which includes the following services: the admissions interview, job development and job placement activities of the coordinating staff, coordinate contacts with employers, processing of employer evaluations of co-ops, articulation between co-op employment and instruction, maintenance of records, and travel expenses.

Summary. In general, if academic credit was provided for the co-op experiences, the institutional's program cost was no more than the cost per FTE for the traditional classroom environment. Some institutions granting credit did charge an additional nominal fee for the semester when the student was in the co-op program to help defray certain costs. No employer costs were incurred if student was qualified; in which case, the student actually helped the employer to make money.

14. Preliminary Planning, Coordination, Orientation of Staff Prior to Implementation.

Responses.

a. Visit other successful institutions with programs.

b. Don't overplan. Obtain okay for credit, and get some students working. Remain flexible enough to alter program as need arises.

c. Instructors and staff collectively plan implementation of new programs as co-op expands.

d. Staff should be oriented to common philosophy, standards, requirements, etc.

e. Prior to the implementation of our program, we spent ten weeks training coordinators for cooperative work experience. Preliminary planning was also involved in working with the fellow staff members in other departments to accept co-op experience within their curriculum.

f. I run program with approval of director and chairman.

Summary. Some of the important factors appear to be to observe successful institutions during the planning phase, get an institutional commitment, properly select and train the program coordinators because these individuals are the key to making the program go, and begin with a few selected candidates in one or two programs and then expand.

15. Other.

Responses.

a. All told we will have in 1974-75 twenty-six co-op programs, about forty staff members involved in coordination; about 1500-1600 co-ops; and about 400 co-op employers.

b. Cooperative work experience is an excellent program and one that has picked up steam, since it has grown from 20 students to 1400 students within a four-year period at our college. We are enthused about cooperative work experience and envision a goal of having each student that participates in the program receiving a degree.

c. Advantages to our students: gives reality to learning, increases educational motivation, develops greater human understanding, accelerates maturation, provides orientation to the world of work, provides financial aid, and provides useful employment contacts. Advantages to employers: provides a good source of labor supply, facilitates recruitment and retention, and permits better utilization of personnel. Advantages to educational institutions: permits more effective use of plant facilities, encourages greater community support and provides benefits to the teaching faculty.

Summary. In general, the institutions involved in cooperative education programs were very excited about their programs and have been quite successful with them particularly if enrollment increases are an indication. There definitely appears to be some advantages associated with the cooperative education program, but again it should be pointed out that the successful institutions have not tried to go co-op overnight but started with only a few select programs and limited enrollments and then proceeded to expand. It is a cooperative venture and one that will succeed only if the total institution is committed and all work together.

CHAPTER V

STUDENT VOCATIONAL INTERESTS IN THE MID-PLAINS NEBRASKA TECHNICAL COMMUNITY COLLEGE AREA

This phase of the study consisted of a survey of vocational interests of junior and senior high students from ten randomly selected Class II and Class III school districts located in the 18-county Mid-Plains Nebraska Technical Community College area, plus the McCook, North Platte and Ogallala school districts. The last three districts were specifically chosen because they represented the largest districts in the area and thus key districts from which the Mid-Plains Nebraska Technical Community Colleges drew students. Samples as utilized in the study are described in considerable detail in Table 3. The samples requested were stratified random samples. The stratification was for grade levels nine, ten, eleven and twelve.

Instrumentation

Two instruments were administered to each of the students: the Ohio Vocational Interest Survey[1] and the Minnesota Work Values Inventory.[2] The Ohio Vocational Interest Survey (OVIS) was selected for the following reasons: (1) each of the items making up the scales was coded to a job title, a DOT code, and worker-trait group assignment;

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[1]D'Costa, Ayres G., David W. Winefordner, John G. Odgers, and Paul B. Koons, Jr., Ohio Vocational Interest Survey (New York: Harcourt Brace Jouvanovich, Inc., 1970).

[2]Super, Donald E. Work Values Inventory (New York: Houghton Mifflin Company, 1970).

TABLE 3

SAMPLE SIZES FROM THE HIGH SCHOOLS SELECTED
FOR THE SURVEY OF STUDENT VOCATIONAL INTERESTS

School	County	Sample Size Requested*	Actual Responses
Sutherland	Lincoln	40	41
Maywood	Frontier	40	39
Eustis	Frontier	40	38
Wauneta	Chase	40	35
Sandhills	Blaine	40	40
Ansley	Custer	40	40
Callaway	Custer	40	39
Wheatland	Perkins	40	40
Brule	Keith	40	38
Ogallala	Keith	120	123
Broken Bow	Custer	120	109
McCook	Red Willow	120	121
North Platte	Lincoln	240	226
TOTAL		960	929

*The sample sizes requested were increased in proportion to the enrollment of the school. For some schools actual sample size exceeded sample size requested.

(2) the test was appropriate for ninth, tenth, eleventh, and twelfth graders; and (3) the test identified vocational interest corresponding to one and two year post-secondary programs in addition to the more typical academic and four to six year professional programs. Questions three, four and five of the student information section were used plus the 280 item Interest Inventory section. The Minnesota Work Value Inventory was selected for two reasons: (1) it was appropriate for ninth, tenth, eleventh and twelfth graders, and (2) it assessed the values and goals which motivate man to work. It was designed to measure the values which are extrinsic to as well as those which are intrinsic in work. Understanding the value structure of a student or client is most important as an aid in clarifying goals and to determining the appropriateness of a given type of training or employment.

In each school district, for administration of the instruments, the students were brought into a central location, the standard directions read by an examiner, and the tests administered.

The data presentation was organized in five sections: (1) some selected background data, (2) the OVIS scales, (3) the OVIS factors, (4) the work values scales, and (5) relationship between the OVIS scales and the work values scales.

Background Data

Presented in Tables 4, 5, and 6 are the data corresponding to questions three, four, and five of the OVIS interest survey. The questions were related to the vocational interest of the student as a part of the high school program and upon leaving the high school. The

TABLE 4

PRESENT PROGRAM OF THE HIGH SCHOOL STUDENTS IN THE MID-PLAINS COMMUNITY TECHNICAL COLLEGE AREA

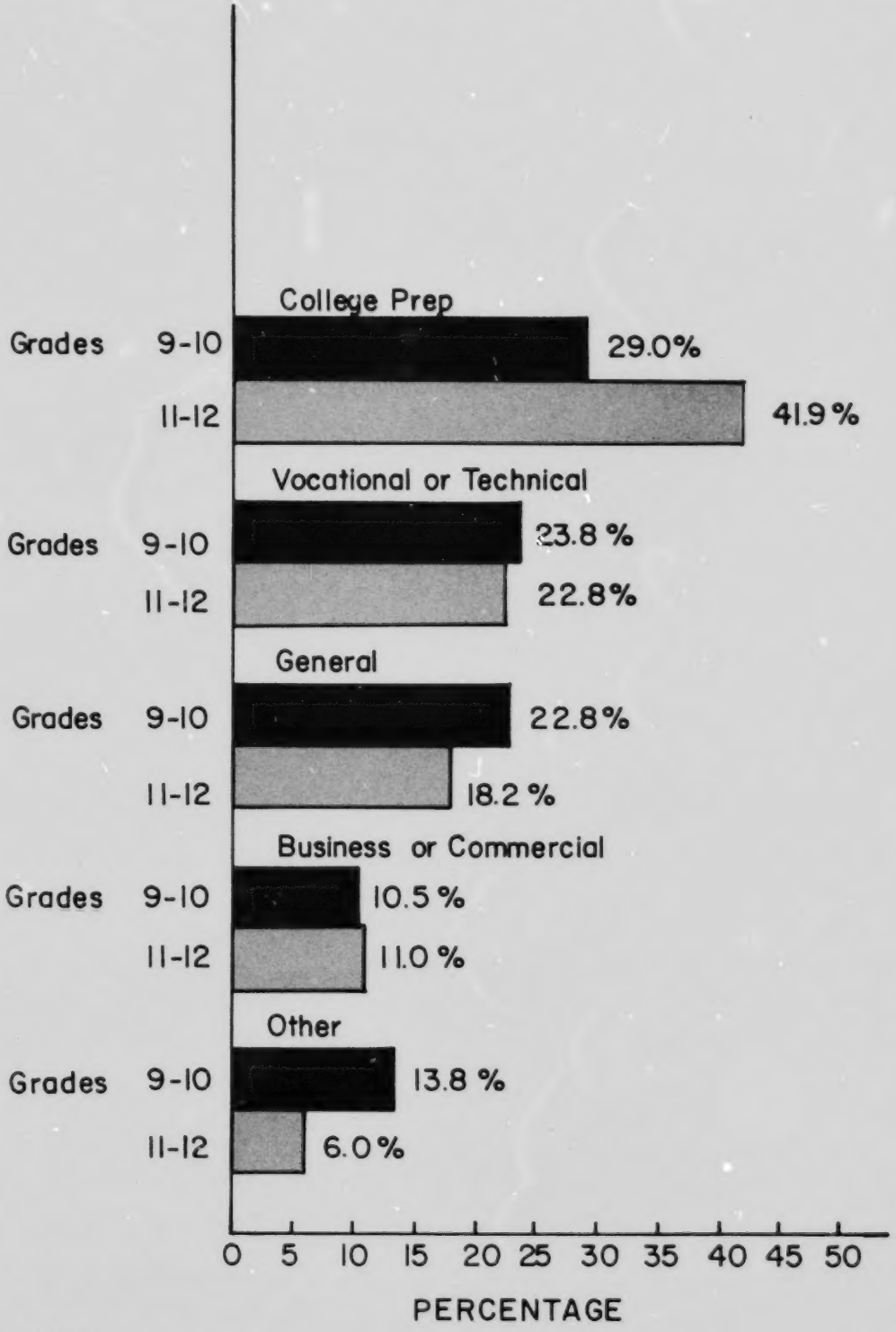

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TABLE 5

TYPE OF EDUCATION OR TRAINING PROGRAM THE HIGH SCHOOL STUDENT IN THE MID-PLAINS COMMUNITY TECHNICAL COLLEGE AREA PLAN TO TAKE AFTER LEAVING HIGH SCHOOL

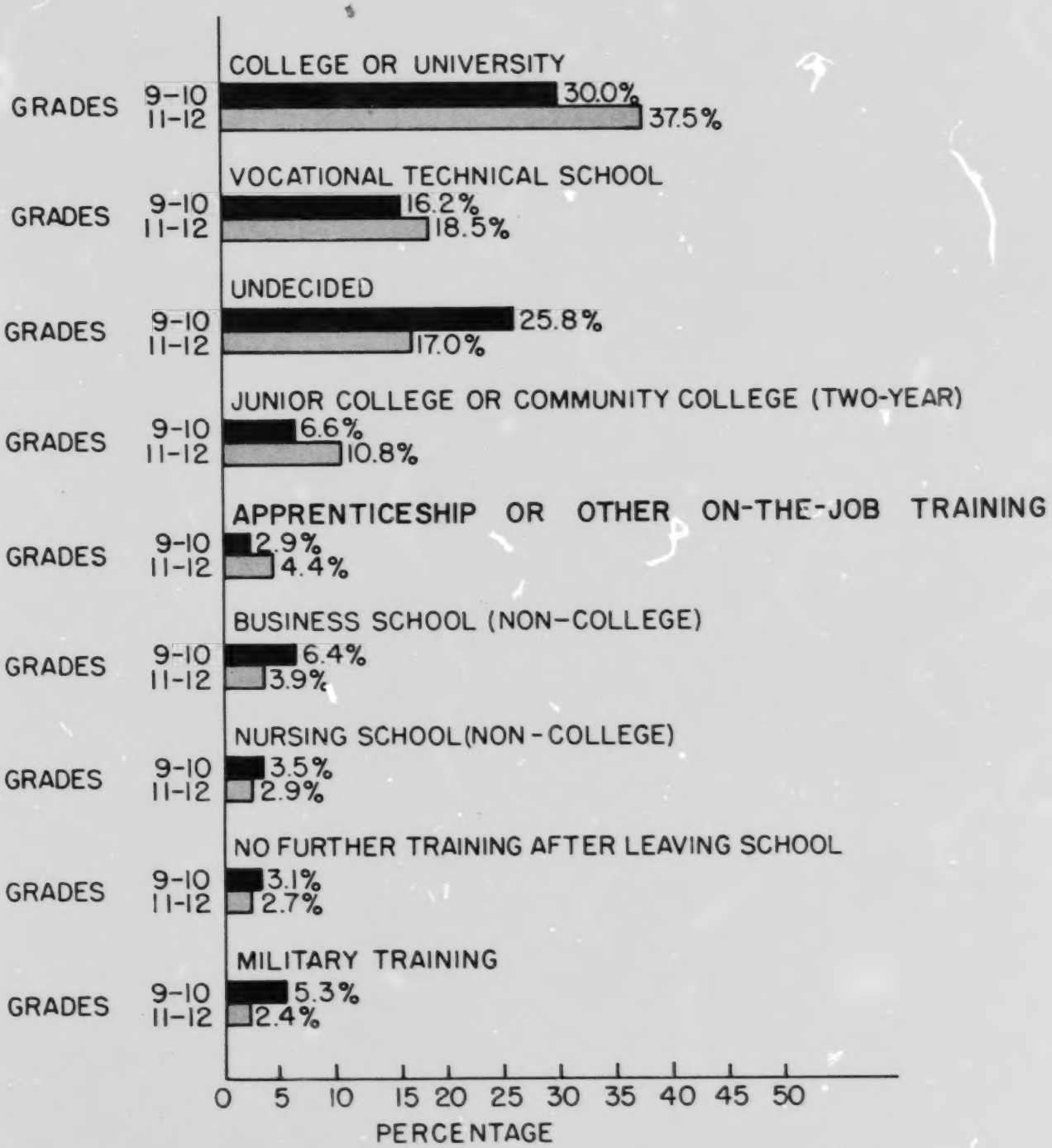
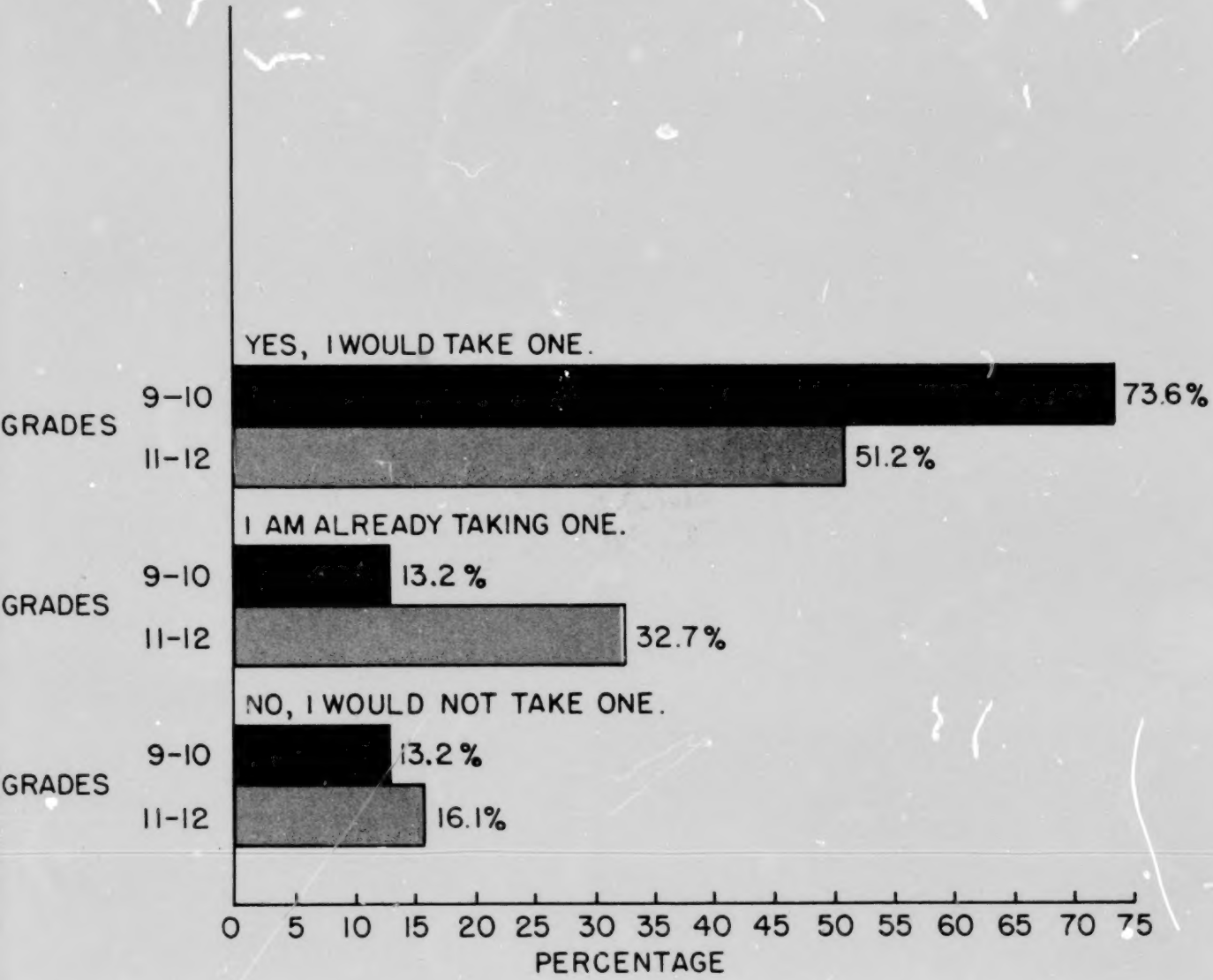


TABLE 6

VOCATIONAL INTEREST OF HIGH SCHOOL STUDENTS IN THE MID-PLAINS COMMUNITY TECHNICAL COLLEGE AREA IN BUSINESS OR VOCATIONAL PROGRAMS OFFERED AS PART OF THE HIGH SCHOOL CURRICULUM.



data were presented for the ninth and tenth grade students as a group and for the eleventh and twelfth grade students as a group. This was done to help facilitate the identification of possible future trends among the students' vocational orientation.

The data in Table 4 indicated that approximately 58 percent of the eleventh and twelfth grade students were not in a college prep program. Of this percentage, approximately 34 percent were either taking or planning to take vocational or technical and business or commercial programs. For the ninth and tenth grade students, an even higher percentage (71 percent) were not in a college prep program and 35 percent were either taking or planning to take vocational or technical and business or commercial programs.

Similar data was shown by the information in Table 5, where approximately 62 percent of the eleventh and twelfth grade students did not plan to go to a four-year college or university. Of this 62 percent, approximately 36 percent indicated that they were planning on attending either a vocational or technical school, a junior or community college, business school (non-college) or nursing school (non-college). Another 17 percent were undecided. For the ninth and tenth grade students, again 70 percent were not planning on attending a four-year college or university and about 33 percent were planning a one- or two-year post-secondary program and another 26 percent were undecided. Using a conservative estimate of 33 percent interested in the business or vocationally-oriented programs and applying that percentage to the approximated 3,000 students that graduate from high schools in the Mid-Plains Technical College area per year, a minimum estimate of about 1,000

students per year can be expected to be looking for a one- to two-year post-secondary program from the Mid-Plains Community Technical College area for the next several years. Add to this one-third of the potential undecided group which approximates about 20 percent and there could be up to another 200 students per year interested in the one- to two-year post-secondary program if the appropriate training programs were offered.

Contained in Table 6 are some additional data concerning business or vocational programs as a part of the high school curriculum. These data further support the data from the previous tables indicating a high interest on the part of the students in the business or vocational program. About 33 percent of the eleventh and twelfth grade students indicated that they were presently enrolled in a business or vocational program and another 51 percent indicating they would take such a program if it was available. This resulted in a total of 84 percent interested. The ninth and tenth grade students were very similar in their views. This time there was a total of 87 percent interested. Fewer of the ninth and tenth grade students were presently enrolled in a business or vocational program but this was probably because the programs are more typically offered in the junior and senior year than the freshman and sophomore year.

OVIS Scale Data

Presented in Appendix D are the mean responses for the Ohio Vocational Interest Survey (OVIS) recorded by scale, job title, DOT code and worker trait group for the total sample of students (9-12)

participating in the survey. To assist in gleaning out some of the information from this data, Tables 7 and 8 have been prepared. Table 7 contains the mean responses for the OVIS scales in order of importance for the total sample of students (9-12), and Table 8 contains the top 25 mean responses for specific worker trait groups in order of importance. Several patterns were observed in studying the tables: (1) the highest vocational interests appeared to be in areas that were people oriented, agricultural oriented, and instructive in nature, (2) the next areas of interest appeared to be in customer service, skilled personal services, promotion and communication, and management and supervision, and (3) there was a very high interest in the artistic, musical and literary areas.

OVIS Factor Data

As a further analysis of the vocational interest data, the various scales were grouped into factors which could be matched to the occupational categories utilized for analyzing the occupational need data in Chapter VI. The seven factors formed and the corresponding scales utilized were as follows:

Factor 1--Professional, Technical, and Managerial Interests
(Scales 9, 11, 12, 13, 14, 16, 17, 18, 19, 21, 22, 23 and 24)

Factor 2--Clerical and Sales Interests
(Scales 5, 8, and 20)

Factor 3--Service Interests
(Scales 3, 4, and 10)

Factor 4--Farming, Fishery, Forestry and Related Interests
(Scale 15)

TABLE 7

MEAN RESPONSES OF THE TOTAL SAMPLE OF STUDENTS (9-12) ON THE OVIS SCALES*

Rank	Description	Mean
1	Scale 11 - Training	2.915
2	Scale 4 - Care of People and Animals	2.915
3	Scale 23 - Teaching, Counseling, and Social Work	2.839
4	Scale 15 - Agriculture	2.834
5	Scale 21 - Music	2.829
6	Scale 19 - Artistic	2.829
7	Scale 8 - Customer Services	2.797
8	Scale 9 - Nursing and Related Technical Services	2.741
9	Scale 17 - Promotion and Communication	2.694
10	Scale 18 - Management and Supervision	2.680
11	Scale 22 - Entertainment and Performing Arts	2.673
12	Scale 16 - Applied Technology	2.645
13	Scale 12 - Literary	2.626
14	Scale 14 - Appraisal	2.559
15	Scale 24 - Medical	2.543
16	Scale 5 - Clerical	2.533
17	Scale 10 - Skilled Personal Services	2.531
18	Scale 7 - Crafts and Precise Operations	2.501
19	Scale 13 - Numerical	2.472
20	Scale 20 - Sales Representative	2.465
21	Scale 3 - Personal Services	2.436
22	Scale 2 - Machine Work	2.385
23	Scale 6 - Inspection-Testing	2.373
24	Scale 1 - Manual Work	2.112

*See Appendix D for specific scale and value descriptions, the corresponding worker-trait mean responses and job titles.

TABLE 8

MEAN RESPONSES OF THE TOTAL SAMPLE OF STUDENTS (9-12) ON THE OVIS FOR THE 25 HIGHEST RANKING WORKER TRAIT GROUPS

Rank	Worker Trait Group	Scale	Mean
1	Animal Training	11 - Training	3.334
2	Animal Care	4 - Care of People and Animals	3.301
3	Flight Training	11 - Training	3.279
6	Guidance and Counseling	23 - Teaching, Counseling and Social Work	3.230
5	Scientific Research	15 - Agriculture	3.241
4	Physical Education	23 - Teaching, Counseling and Social Work	3.264
7	Kindergarten, Elementary	23 - Teaching, Counseling and Social Work	3.193
9	Child and Adult Care	4 - Care of People and Animals	3.158
8	Musical Work, Vocal	21 - Music	3.169
10	Industrial Training	11 - Training	3.119
11	Art Work	19 - Artistic	3.110
16	Nursing, X-ray	9 - Nursing and Related Technical Services	3.010
12	Cooking	10 - Skilled Personal Services	3.091
15	Musical Work, Instrumental	21 - Music	3.011
13	Information Gathering, Dispensing, Verifying	8 - Customer Services	3.082

TABLE 8 continued

Rank	Worker Trait Group	Scale	Mean
14	Decorating and Art	19 - Artistic	3.048
17	Interviewing, Information Giving	17 - Promotion and Communication	2.982
18	Misc. Instructive Work	11 - Training	2.982
19	Legal	17 - Promotion and Communication	2.972
20	Creative Writing	12 - Literary	2.971
21	Cropping, Animal Farming, Gardening	15 - Agriculture	2.963
22	Setup and Machine Operation	7 - Crafts and Precise Operations	2.960
23	Supervising Work	18 - Management and Supervision	2.955
24	Facilities, Services, Movement Allocating	8 - Customer Services	2.945
25	Dramatics	22 - Entertainment and Performing Arts	2.939

Factor 5--Processing Interests

(Scale 6)

Factor 6--Machine Trades Interests

(Scale 2)

Factor 7--Structural and Bench Work Interests

(Scale 7)

Means were then calculated on each of the factors and a horizontal bar graph plotted and displayed as in Table 9. The top ranking interest area was Farming, Fishery, Forestry and Related Interests (Factor 4), followed in order by Professional, Technical, and Managerial (Factor 1), Service (Factor 3), Structural and Bench (Factor 7), Clerical and Sales (Factor 2), Machine Trades (Factor 6) and Processing (Factor 5). To eliminate confounding in the interest areas by those students interested in the four-to-six year college and university program, a separate analysis was run for only those students indicating that they planned to attend a one- or two-year post-secondary business, nursing, junior college or vocational-technical program. Those data are presented in Table 10. Notice that Professional, Technical, and Managerial (Factor 1) now fell to fourth, and that Clerical and Sales (Factor 2) moved up to third and that Structural and Bench (Factor 7) went to fifth. This data should be of particular interest when compared to the occupational need data of Chapter VI.

Work Values Scale Data

A final analysis which was conducted in analyzing the vocational interest and career goals of the student and the Mid-Plains Community

TABLE 9

MEAN RESPONSES OF THE TOTAL SAMPLE OF STUDENTS, GRADES (9–12), ON SEVEN INTEREST FACTORS.

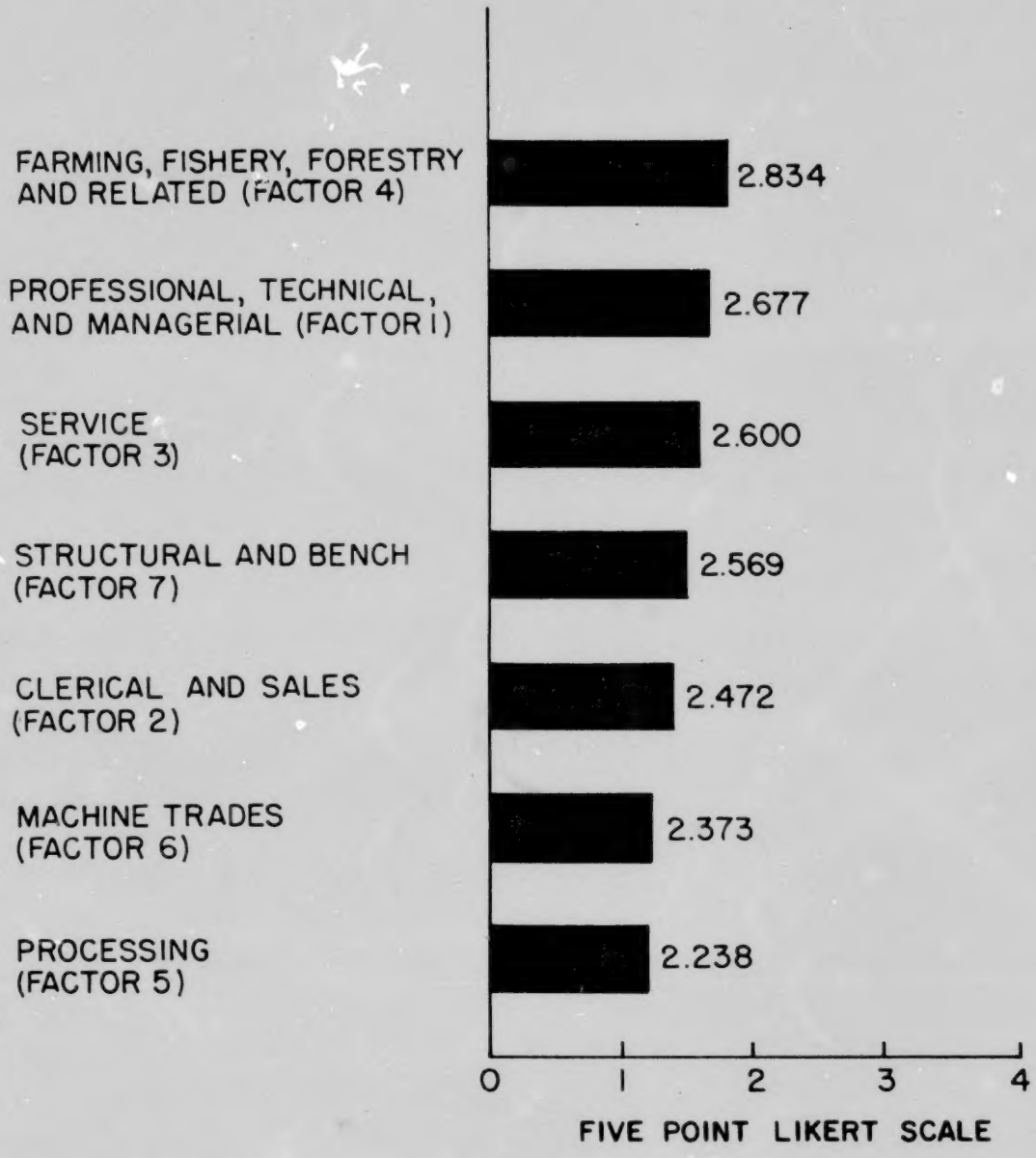


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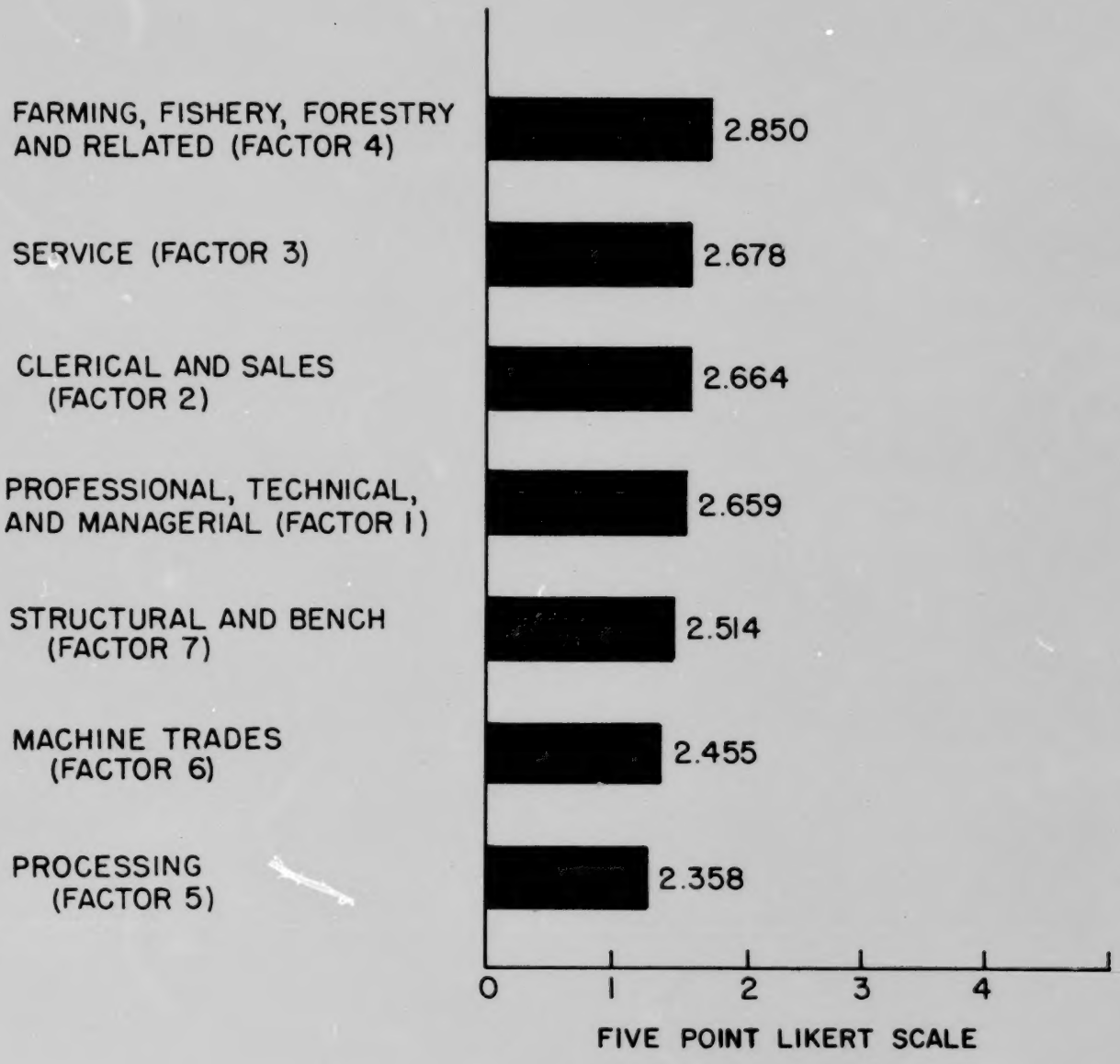
TABLE 10

EAN RESOURSES OF THOSE STUDENTS, GRADES (9–12), INDICATING AN INTEREST
A ONE OR TWO YEAR POST-SECONDARY BUSINESS, NURSING, JUNIOR COLLEGE
R VOCATIONAL-TECHNICAL PROGRAM.



Technical College was an analysis of work values. Fifteen work values were looked at. They were:

1. Altruism: This work value, or goal, is present in "work which enables one to contribute to the welfare of others." Altruism assesses social service values and interests.
2. Esthetic: A value interest in "work which permits one to make beautiful things and to contribute beauty to the world." Artistic.
3. Creativity: A value associated with "work which permits one to invent new things, design new products, or develop new ideas." Creativity is typically related to artistic and scientific interest.
4. Intellectual Stimulation: Associated with "work which provides opportunity for independent thinking and for learning how and why things work." Intellectual stimulation appears to assess a quality which characterizes people with professional and scientific interests of an abstract type.
5. Achievement: A value associated with "work which gives one a feeling of accomplishment in doing a job well." Achievement appears to assess a task orientation, a liking for work with visible, tangible results.
6. Independence: Associated with "work which permits one to work in his own way, as fast or as slowly as he wishes." Office machine repairmen, electronics technicians, and business students typically score relatively high.

7. Prestige: Associated with "work which gives one standing in the eyes of others and evokes respect." Desire for respect of others rather than for status or for power.
8. Management: Associated with "work which permits one to plan and lay out work for others to do." Management values characterize business students, people interested in contact occupations, and persons in occupations requiring that they plan their own work even if not of others.
9. Economic Returns: A value or goal associated with "work which pays well and enables one to have the things he wants." Materialistic, the attaching of importance to tangibles, to earnings.
10. Security: Associated with "work which provides one with the certainty of having a job even in hard times." Usually related to Economic Returns, as is to be expected in the case of a second kind of material value. Semi-skilled factory workers [illegible] students usually assign it more importance.
11. Surroundings: A value associated with "work which is carried out under pleasant conditions. The materials environment in which work is done. Typically associated with technical interest.
12. Supervisory Relations: A value associated with "work which is carried out under a supervisor who is fair and whom one can get along." Attaching of importance to getting along with the boss. Semi-skilled workers usually assign it more importance.

13. Associates: A value characterized by "work which brings one into contact with fellow workers whom he likes." Usually considered important by office workers and people in lower-level skilled occupations.

14. Way of Life: Associated with the kind of work that "permits one to live the kind of life he chooses and to be the type of person he wishes to be."

15. Variety: Associated with "work that provides an opportunity to do different types of jobs." Appears to reflect a pleasure rather than a task orientation. Variety may be associated with intellectual stimulation esthetic and creative values in an unusual combination, rather than with supervisory relations and associates.

The work values data were presented in Tables 11 and 12. In Table 11 are the mean responses of all of the students in grades 9-12 on the work values scales. Way of Life, Economic Return, Achievement, Supervisory Relations, and Security were the top five work values listed. All five were indicators of materialistic work values and of visible and tangible results. These five scales were the only scales which were such indicators. This seems to imply a very strong work ethnic orientation. These indicators are also typically representative of agriculturally oriented occupational groups. This was reflected earlier as the farming oriented factor on the Ohio Vocational Interest Survey was the highest ranking interest indicator (see Table 9).

The next work value indicated was Altruism which is typically an indicator of social service values such as indicated by social workers,

TABLE 11

MEAN RESPONSES OF THE TOTAL SAMPLE OF STUDENTS (9-12) ON THE WORK VALUES SCALES

Rank Scales	Mean*	Rank
Way of Life	4.506	1
Economic Return	4.217	2
Achievement	4.201	3
Supervisory Relations	4.178	4
Security	4.169	5
Altruism	4.052	6
Surroundings	3.939	7
Independence	3.919	8
Intellectual Stimulation	3.726	9
Variety	3.706	10
Prestige	3.699	11
Creativity	3.676	12
Associates	3.939	13
Management	3.104	14
Esthetics	2.958	15

*5 means "Very Important"
4 means "Important"
3 means "Moderately Important"
2 means "Of Little Importance"
1 means "Unimportant"

TABLE 12

MEAN RESPONSES OF THOSE STUDENTS GRADES (9-12) INDICATING AN INTEREST IN A ONE OR TWO-YEAR POST-SECONDARY BUSINESS, NURSING, JUNIOR COLLEGE OR VOCATIONAL-TECHNICAL PROGRAM

Rank Scales	Mean*	Rank
Way of Life	4.494	1
Economic Return	4.240	3
Achievement	4.229	4
Supervisory Relations	4.214	5
Security	4.248	2
Altruism	4.009	6
Surroundings	4.006	7
Independence	3.912	8
Intellectual Stimulation	3.653	13
Variety	3.703	9
Prestige	3.703	10
Creativity	3.664	11
Associates	3.653	12
Management	3.102	14
Esthetics	2.984	15

*5 means "Very Important"
4 means "Important"
3 means "Moderately Important"
2 means "Of Little Importance"
1 means "Unimportant"

nurses and teachers. Basically, individuals concerned with people will score high on Altruism. This was also reflected earlier on the vocational interest scales as such interests as Care of People and Animals, Teaching, Counseling, and Social Work, Customer Services and Nursing were all very highly rated interests of the students.

The next work values in order of importance were Surroundings, Independence and Intellectual Stimulation. These work values are all indicators of technical, computational and clerical oriented interests. These values are also indicators of professional and scientific interests. In particular, the intellectual stimulation value appears to assess that quality. This would seem to indicate that if the four-to-six-year college and university-oriented students were pulled from the sample that the order of importance for some of the work values may change. Presented in Table 12 is a data display of the work values of only those students grades 9-12 indicating an interest in a one- or two-year post-secondary business, nursing, junior college or vocational-technical program. In Table 12 the work value Intellectual Stimulation did change from a position of nine to thirteen for this group. Also, the work value of Security went from fifth in importance (4.169) to second (4.248) indicating a slightly stronger interest in job security among those interested in one- or two-year post-secondary school programs.

The single greatest change in mean score was on the work value Associates indicating greater tolerance by students oriented to the one- or two-year programs than by the student sample as a whole.

Relationship of OVIS with Work Values Inventory

As a summary presentation, the Minnesota Work Value Scales were correlated with the Ohio Vocational Interest Scales and dispalyed in Table 13. In close study of this table, some interesting relationships were indicated:

1. The work values of Economic Return and Security have identical significant correlations with the interest areas, and are mutually exclusive of the significant correlations between the work values of Way of Life, Achievement and Supervisory Relations, and the interest areas. This would indicate that we have two distinct groups of students attending the post-secondary institution with unique sets of work values. The one group was interested more in the Training, Teaching, Nursing, Care of People and Animals and Customer Service type occupations and the other group more interested in the applied, technical, and machine oriented areas. This should effect the type of program which is offered if we are interested in attracting both groups of students.
2. The work value pattern of the student interested in the Training interest area was very similar to that of Customer Service, that of the Skilled Personal Service interest area to that of Clerical Work, and that of the Sales Representative interest area to that of Appraisal, Applied Technology and Supervision and Management. This means that if there was an occupational need in the Training area, for example, that students with Customer Service interests could go into the Training oriented

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TABLE 13

SIGNIFICANT POSITIVE RELATIONSHIPS AT THE .05 LEVEL
BETWEEN THE MINNESOTA WORK VALUES SCALES AND
THE OHIO VOCATIONAL INTEREST SURVEY SCALES

INTEREST SCALES* \ WORK VALUE SCALES*	Way of Life	Economic Return	Achievement	Supervisory Relations	Security	Altruism	Surroundings	Independence	Intellectual Stimulation	Variety	Prestige	Creativity	Associates	Management	Esthetics
Training	X			X		X			X	X			X		
Care of People and Animals	X		X	X		X									
Teaching, Counseling and Social Work	X		X			X			X	X		X			
Agriculture								X		X					
Music			X			X			X	X		X			X
Artistic	X		X	X		X			X	X		X	X		X
Customer Service	X			X		X	X			X			X		X
Nursing and Related Technical Service	X		X			X	X		X			X			
Promotion and Communication	X					X			X	X	X	X		X	
Management and Supervision		X			X				X	X	X	X	X	X	
Entertainment and Performing Arts	X		X			X				X	X	X	X		X
Applied Technology		X			X			X	X	X	X	X		X	
Literary	X					X			X	X	X	X			X
Appraisal		X			X			X	X	X	X	X		X	
Medical			X			X			X		X	X		X	
Clerical Work						X	X								X
Skilled Personal Services						X	X						X		X
Crafts and Precise Operations		X			X			X						X	
Numerical									X	X	X	X		X	
Sales Representative		X			X				X		X			X	
Personal Services				X		X	X						X		X
Machine Work		X			X			X						X	
Inspection-Testing		X			X									X	X
Manual Work														X	

*All Scales are in order of importance. Significant correlations are denoted by an "X".

program and be quite satisfied in terms of work values. The same analogy would be true for the other areas mentioned.

3. In Table 12 it was indicated that Security was a highly rated work value of certain one- and two-year post-secondary students. This would imply that programs of interest which have a significant correlation with the work value of Security would be particularily appealing to this type of student. Such programs would be in the Management and Supervision, Appraisal, Crafts and Precise Operations, Sales Representative, Machine Work, and Inspection-Testing areas.
4. Altruism was the work value with the greatest number of significant correlations to the interest areas, again indicating that Mid-Plains students have a very high interest in the welfare of people and people oriented vocational interest areas.
5. There were a number of students with the common work values of Altruism, Variety and Creativity which one may want to consider program offerings for. Appropriate occupations would be Music, Artistic, Promotion and Communication and Literary oriented areas.

CHAPTER VI

OCCUPATIONAL OPPORTUNITIES IN THE MID-PLAINS NEBRASKA TECHNICAL COMMUNITY COLLEGE AREA

The major purpose of this phase of the study was to identify manpower needs and job opportunities available in the Mid-Plains Nebraska Technical Community College area. Utilizing an interview technique, employers were asked to list the number of persons employed, job duties of persons employed (job description), and to project future needs according to these job descriptions. A copy of the interview guide is contained in Appendix E. The data supplied by employers as job descriptions were coded by job title and number using the Dictionary of Occupational Titles[1] and related to a corresponding instructional training program and number according to Vocational Education and Occupations.[2] Both documents are necessary references when using the information contained in this section for a program planning base.

A comprehensive list of employers was identified for the eighteen-county Mid-Plains Technical College area. This list was obtained from the Nebraska Research Coordinating Unit for Vocational Education (RCU) and included some 8,233 names and addresses of employers employing one

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[1]U.S. Department of Labor, Dictionary of Occupational Titles, Vol. 1, Third Edition (Washington, D.C.: U.S. Government Printing Office, 1965).

[2]U.S. Office of Education, Vocational Education and Occupations OE-80061 (Washington, D.C.: U.S. Government Printing Office, 1969).

or more persons. The original master list was compiled from the following sources: (1) IRS 941 (firms employing one or more persons), (2) IRS 942 (domestic help), (3) IRS 943 (farmers and ranchers employing hired labor), (4) the Employment Security Division of the State Department of Labor (out-of-state firms with in-state locations, and federal, state, local tax exempt agencies), and (5) the State Tax Commissioner (the State Business Master File). This master list was then updated by RCU through the removal of firms no longer in existence using a compiled list from the Division of Employment of the Nebraska Department of Labor and adding new firms from the ES 202 listing.

In order to combine data for a larger information base, the procedure selected for employer interviews was the same as annually used by the RCU in compiling the Occupational Opportunities in Nebraska report. Combining procedures allowed the use of existing instrumentation, interview and coding practices as well as increasing the amount of information available. The samples utilized in the study were as follows:

1. A random sample of approximately 5 percent of the 8,233 employers employing one or more persons across the entire Mid-Plains, eighteen-county area. The counties included were: Cherry, Loup , Hooker, Thomas, Blaine, Custer, Logan, McPherson, Arthur, Keith, Perkins, Lincoln, Chase, Hayes, Frontier, Dundee, Hitchcock and Red Willow. The purpose of the random sample technique used was so that projections across the entire area could be made if so desired. There were 451 employers in this sample. The sample yielded 328

valid responses. This sample will be referred to as the RCU Area 2 (5 percent sample).

2. A sample of all employers with 25 or more employees plus a random sample of approximately 10 percent of all other employers from the immediate thirteen-county area surrounding the three institutions of McCook Junior College, Mid-Plains Nebraska Technical College and North Platte Junior College. The counties included were: Custer, Logan, McPherson, Arthur, Keith, Perkins, Lincoln, Chase, Hayes, Frontier, Dundee, Hitchcock and Red Willow. The purpose was to provide for more comprehensive data on employers, in particular the large firms, which were in the immediate vicinity of the colleges and thus were high potential co-op employers. There were 102 firms of 25 or more employees and 560 small firms in this sample. The sample yielded 499 valid responses.

Together the purpose was to sample approximately 1,000 employers from the region. In total 1,116 employers were identified, and 827 valid responses obtained. A complete list of all the employers interviewed is presented in Appendix F.

The interviews were conducted by students from the Mid-Plains Technical Community College area and by advanced doctoral students from the Department of Educational Administration, University of Nebraska. Each student was appropriately trained through a standardized training procedure and then assigned from 50-75 employers to contact.

Occupational Opportunities

To facilitate interpretation of the data in terms of those employers in the immediate vicinity of the McCook Junior College and those employers in the immediate vicinity of the North Platte Colleges if so desired, the thirteen-county sample was further subdivided into a six-county sample of Chase, Hayes, Frontier, Dundee, Hitchcock and Red Willow and a seven-county sample of Custer, Logan, McPherson, Arthur, Keith, Perkins and Lincoln, respectively. In addition, since all samples were mutually exclusive, a total of actual counts from all samples was compiled.

Presented in Appendix G is a Summary by Occupational Category table which lists the total actual employment and need for the samples for the one-digit occupational catagories as classified by the Dictionary of Occupational Titles. Additionally, Appendix G contains a series of tables showing actual employment and future need for the occupational groups within each of the occupational categories. These tables include the corresponding Instructional Training Program as listed in Vocational Education and Occupations. An asterisk appearing in the Instructional Training Program column indicates job titles which do not have corresponding Instructional Training Programs.

Employment Opportunities, determined from employer interview, were tabulated to indicate now employed and need for the next twelve months based upon expansion and turnover. Need for the following two years, beyond the twelve-month projection, was based upon employer estimates. Subtotals were listed following each Occupational Group (three-digit) and totals were listed at the end of each Occupational Category (one-digit).

A brief summary of the data contained in each of the tables in Appendix G is included below.

Professional, Technical and Managerial Occupations was the largest Occupational Category with 2,125 persons now employed and a twelve-month need of 223 persons. This area of 151 Job Titles involved 7 different Vocational Technical Areas, 39 Instructional Training Programs and 79 Job Titles with no identified Instructional Training Program.

Clerical and Sales Occupations represented the second largest Occupational Category with 2,068 persons now employed and a twelve-month need of 280 persons. The Clerical and Sales Occupations encompassed 120 Job Titles, 4 different Vocational Technical Areas, 46 Instructional Training Programs and 3 Job Titles with no identified Instructional Training Program in the Vocational Education and Occupations document.

Service Occupations was the third largest Occupational Category with 1,804 persons now employed and a twelve-month need of 550 personnel. This area of 75 Job Titles involved 5 different Vocational Areas, 26 Instructional Training Programs and 8 Job Titles with no identified Instructional Training Program.

Miscellaneous Occupations was the fourth largest Occupational Category with 1,114 persons now employed and a twelve-month need of 143 persons. This area of 49 Job Titles involved 3 different Vocational Areas, 12 Instructional Training Programs and 30 Job Titles with no identified Instructional Training Program.

Bench Work Occupations was the fifth largest Occupational Category with 932 persons now employed and a twelve-month need of 82 persons. This area of 19 Job Titles involved 1 Vocational Area, 8 Instructional Training Programs and 11 Job Titles with no identified Instructional Training Program.

Structural Work Occupations was the sixth largest Occupational Category with 682 persons now employed and a twelve-month need of 123 persons. This area of 71 Job Titles involved 2 Vocational Areas, 20 Instructional Training Programs and 13 Job Titles with no identified Instructional Training Program.

Farming, Fishery, Forestry and Related Occupations was the seventh largest Occupational Category with 646 persons now employed and a twelve-month need of 119 persons. This area of 27 Job Titles involved 1 Vocational Area, 10 Instructional Training Programs and 2 Job Titles with no identified Instructional Training Program.

Machine Trades Occupations was the eighth largest Occupational Category with 258 persons now employed and a twelve-month need of 64 persons. This area of 34 Job Titles involved 3 different Vocational Areas, 17 Instructional Training Programs and 8 Job Titles with no identified Instructional Training Program.

Processing Occupations was the ninth largest Occupational Category with 180 persons now employed and a twelve-month need of 34 persons. This area of 28 Job Titles involved 3 different Vocational Areas, 5 Instructional Training Programs and 19 Job Titles with no identified Instructional Training Program.

Occupations with no DOT number was the tenth largest Occupational Category with 65 persons now employed and a twelve-month need of 6 persons. This area was made up of 2 Job Titles with no Vocational Areas or Instructional Training Programs.

In summary, to facilitate obtaining a better picture of the overall occupational need for the next three years in the Mid-Plains Nebraska Technical Community College area, a series of horizontal bar graphs corresponding to the overall employment and occupational categories and to each of the occupational group arrangements were presented in Tables 14 to 24. For each table actual need was represented for the next three years by presenting a display of the total of the twelve-month need and the next two years' need, which was the need for the following two years beyond the twelve-month projection. Only those occupational groups where the need was five persons or more were shown.

The data from Table 14 indicated that present employment was highest in the Professional and Technical occupational category. This was followed in order by the occupational categories of Clerical and Sales, Service and Miscellaneous, Bench, Structural, Farming-Fishery-Forestry, Machine Trades, and Processing. The greatest need, as indicated in Table 15, was in the occupational category of Service followed by Clerical and Sales, Professional and Technical, Structural, Miscellaneous, Farming-Fishery-Forestry, Machine Trades, Bench and Processing. It was also noted that the employment pattern and the need patterns were very similar. The major difference was Service with a considerable increase in Service seen in the next three years. The other category of need which showed a good increase over present

TABLE 14

TOTAL PRESENT EMPLOYMENT FROM ALL SAMPLES BY OCCUPATIONAL CATEGORIES

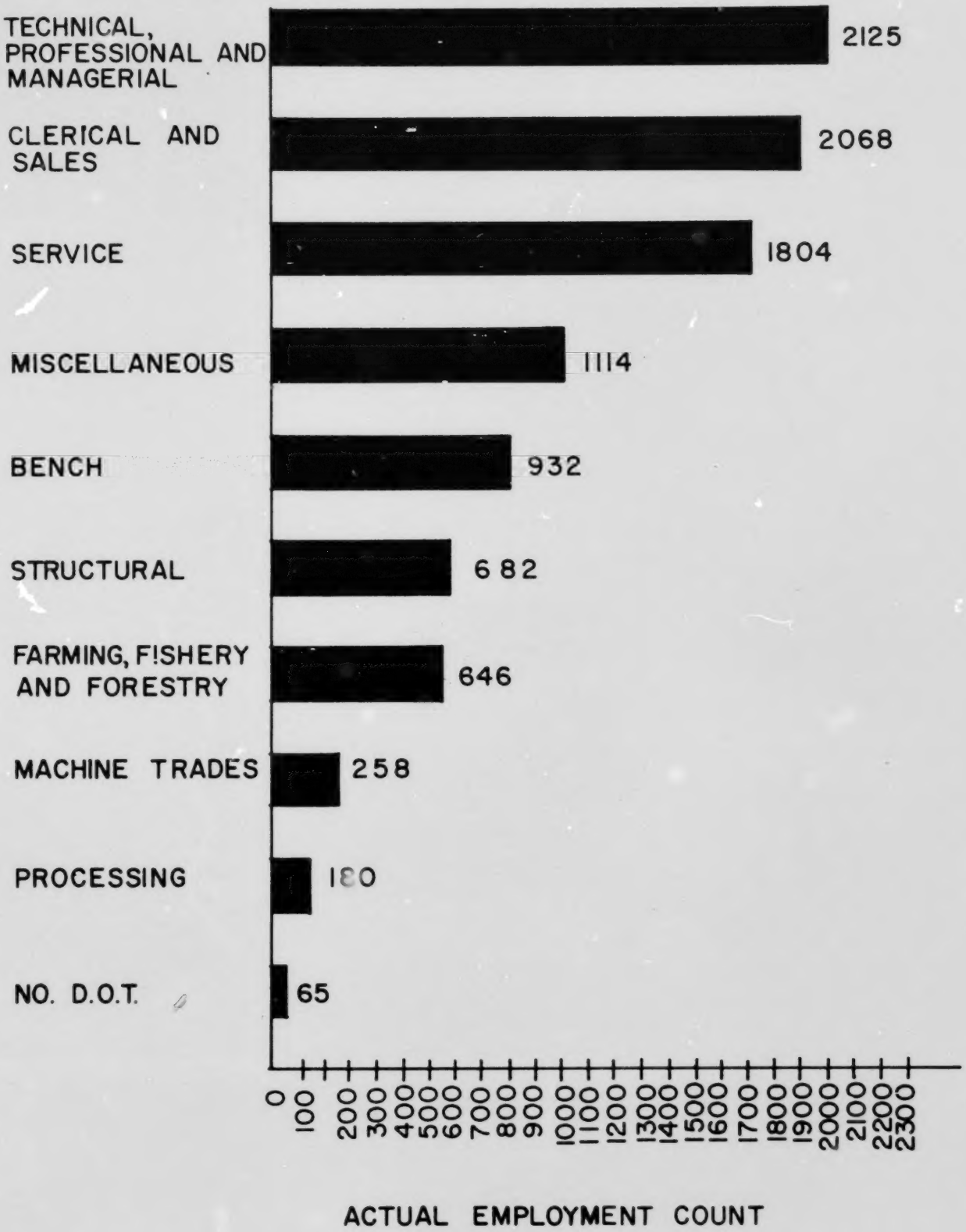


TABLE 15

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FOR NEXT THREE YEARS BY OCCUPATIONAL CATEGORIES

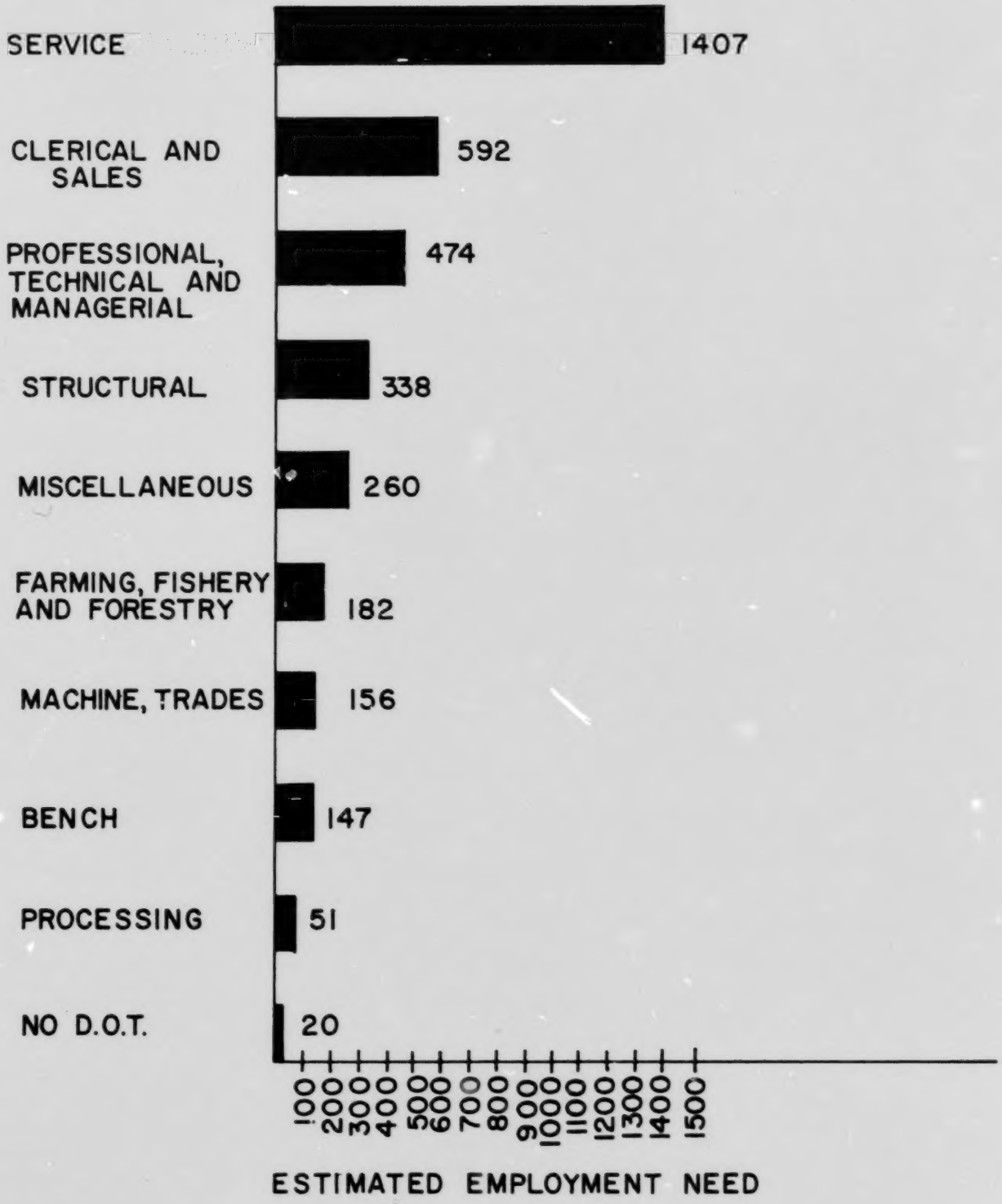


TABLE 16

TOTAL OF ESTIMATED EMPLOYMENT NEED FOR SERVICE OCCUPATIONS

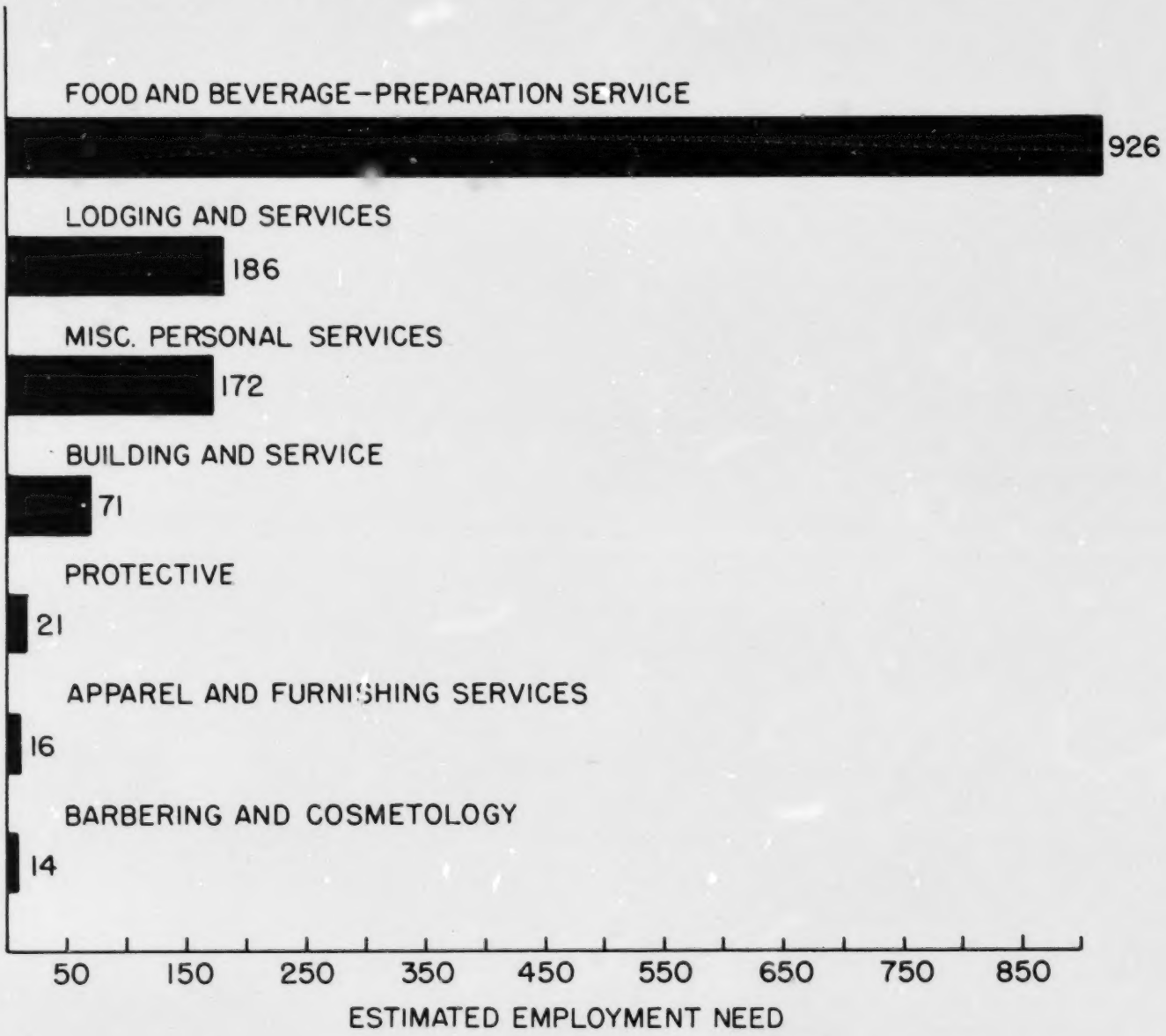


TABLE 17

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FOR CLERICAL AND SALES OCCUPATIONS

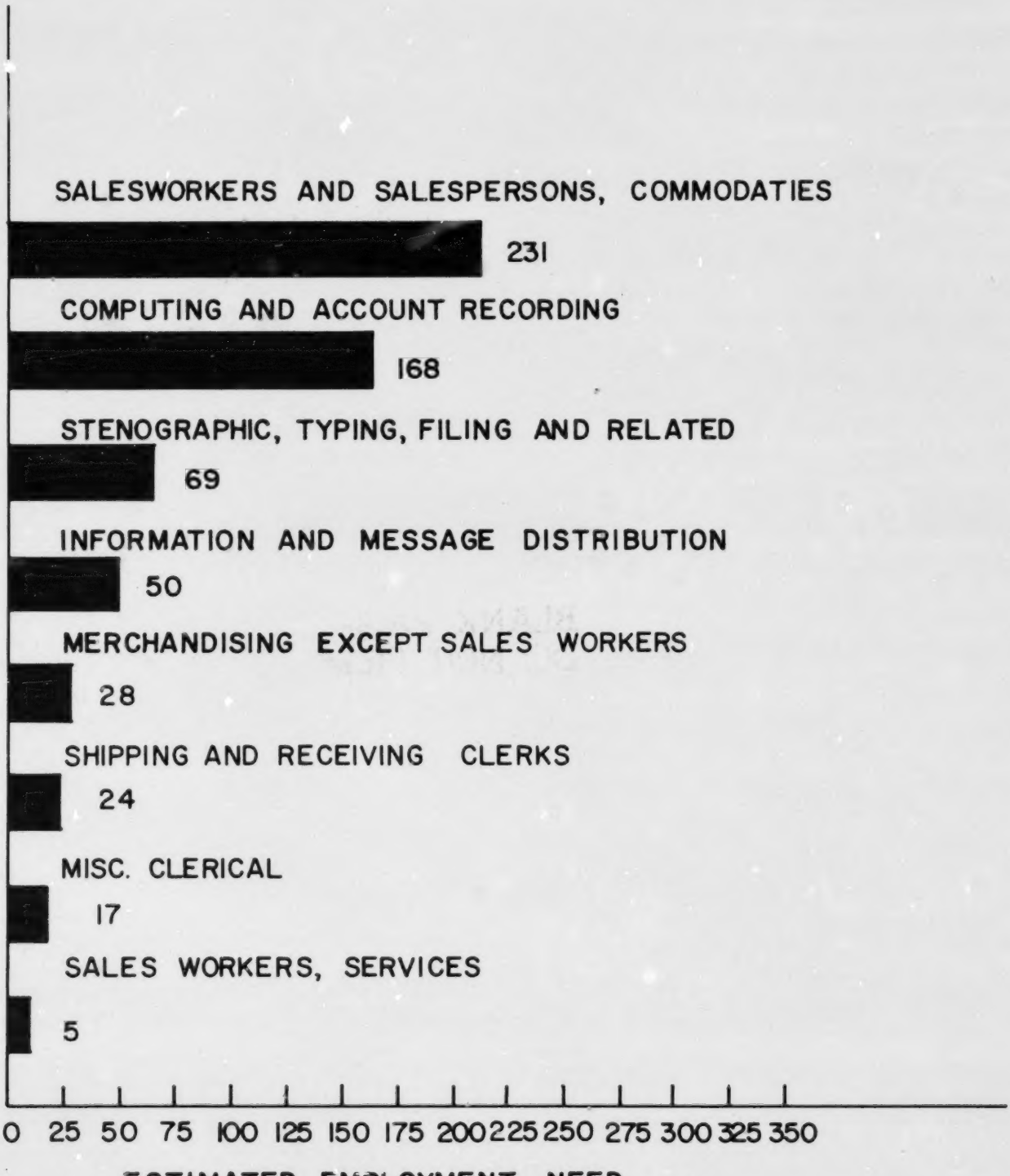


TABLE 18

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FOR PROFESSIONAL, TECHNICAL AND MANAGERIAL OCCUPATIONS

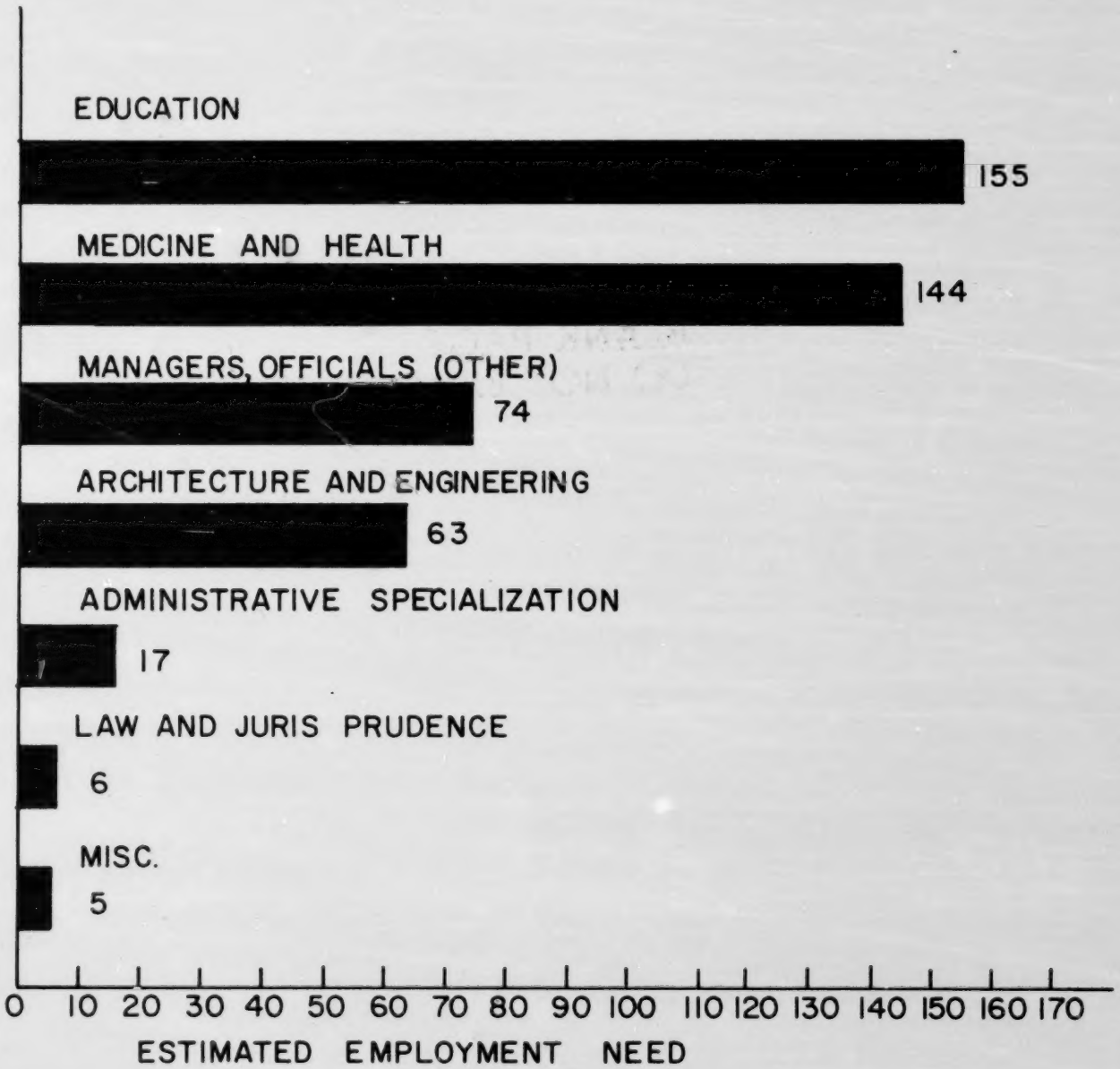


TABLE 19

TOTAL OF ESTIMATED EMPLOYMENT FROM ALL SAMPLES
FOR STRUCTURAL WORK OCCUPATIONS

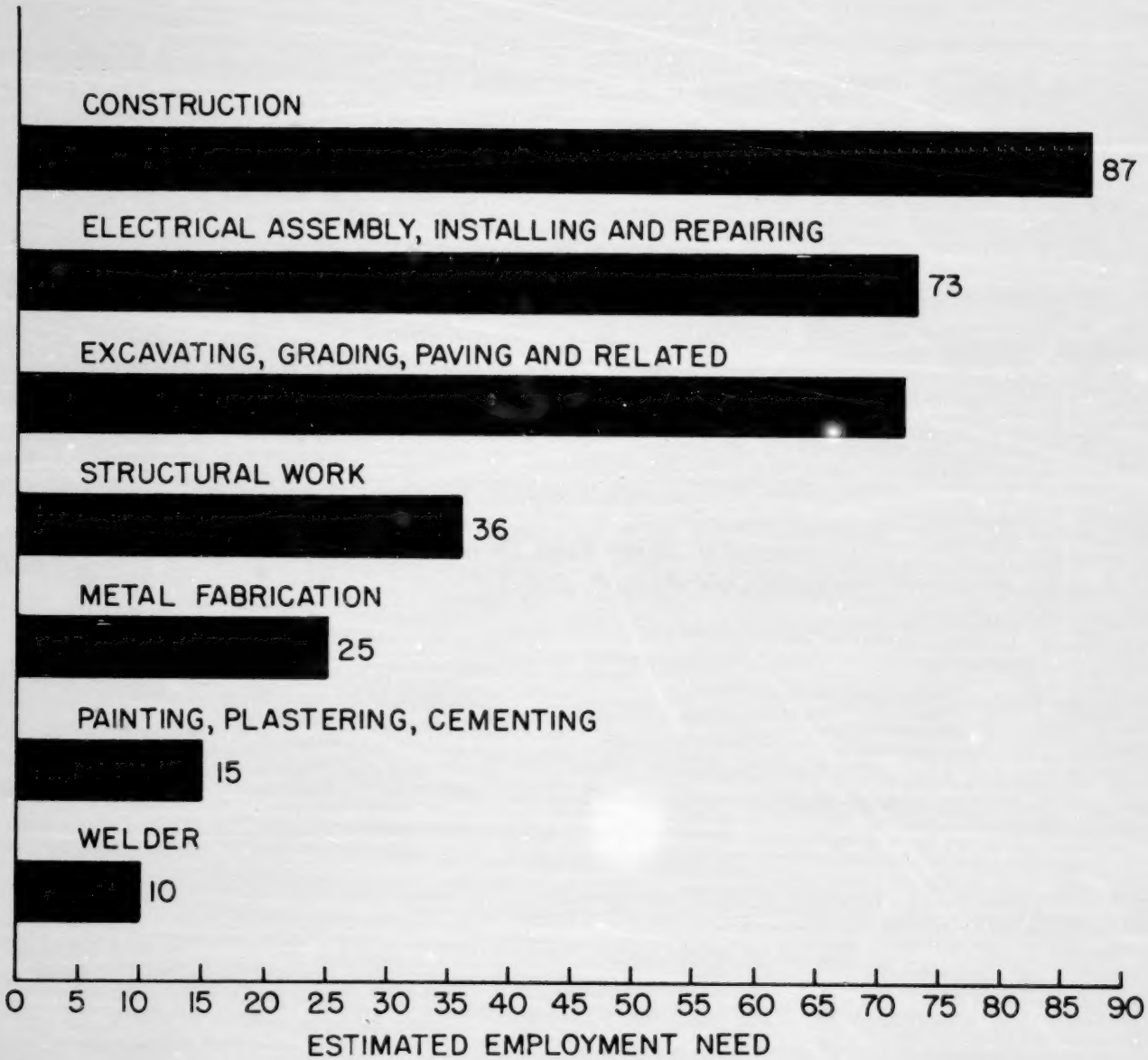


TABLE 20

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FOR MISCELLANEOUS OCCUPATIONS

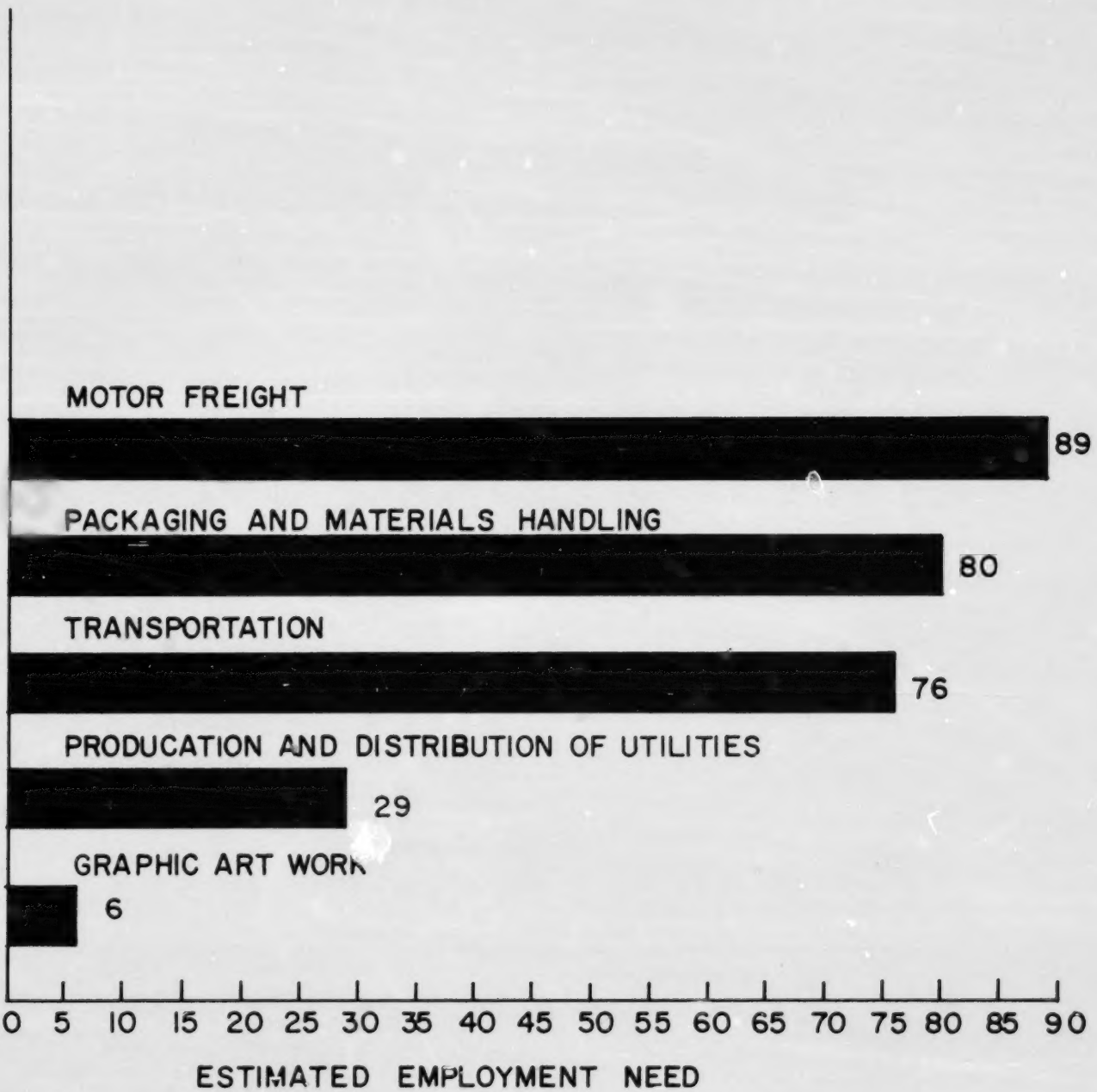


TABLE 21

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES OF BENCH WORK

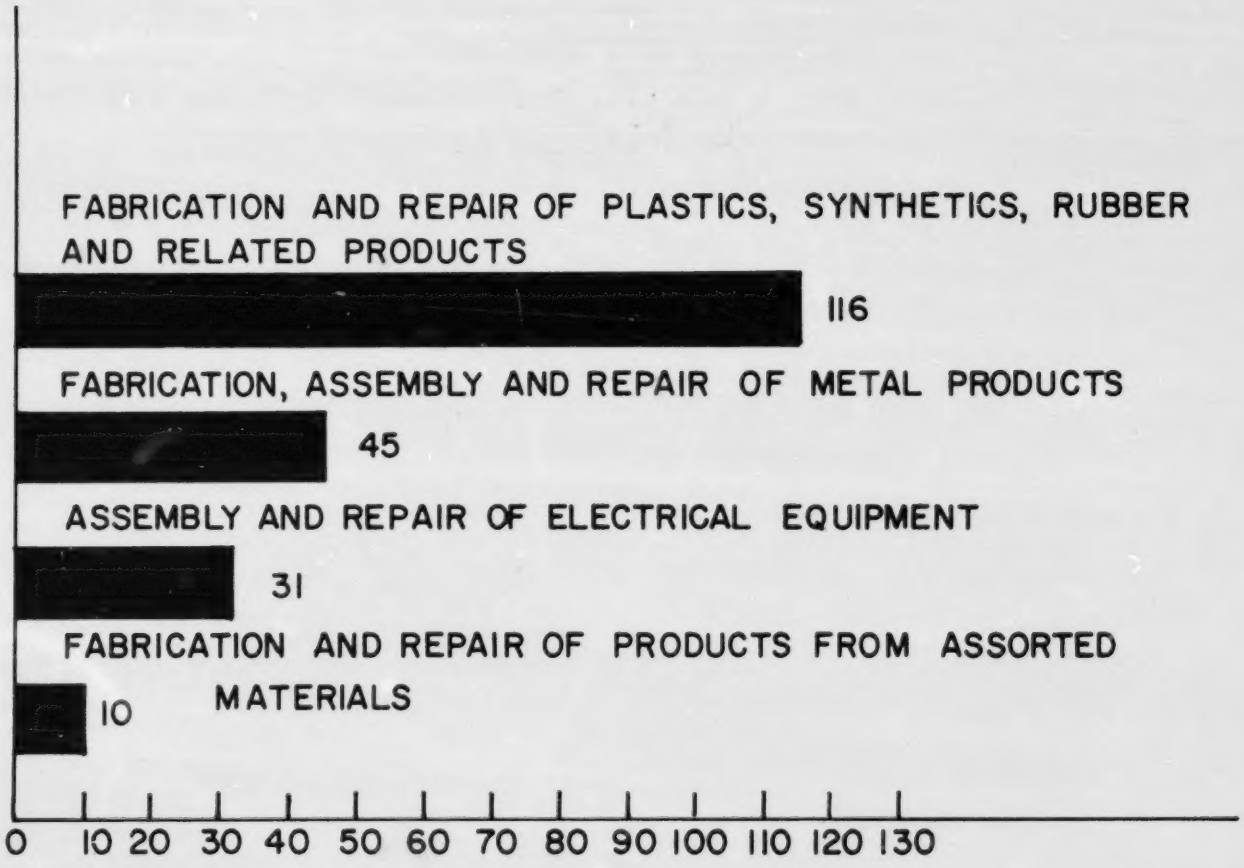

FABRICATION AND REPAIR OF PLASTICS, SYNTHETICS, RUBBER AND RELATED PRODUCTS
116
FABRICATION, ASSEMBLY AND REPAIR OF METAL PRODUCTS
45
ASSEMBLY AND REPAIR OF ELECTRICAL EQUIPMENT
31
FABRICATION AND REPAIR OF PRODUCTS FROM ASSORTED MATERIALS
10
0 10 20 30 40 50 60 70 80 90 100 110 120 130
ESTIMATED EMPLOYMENT NEED

TABLE 22

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FROM FARMING, FISHERY, FORESTRY, AND RELATED OCCUPATIONS

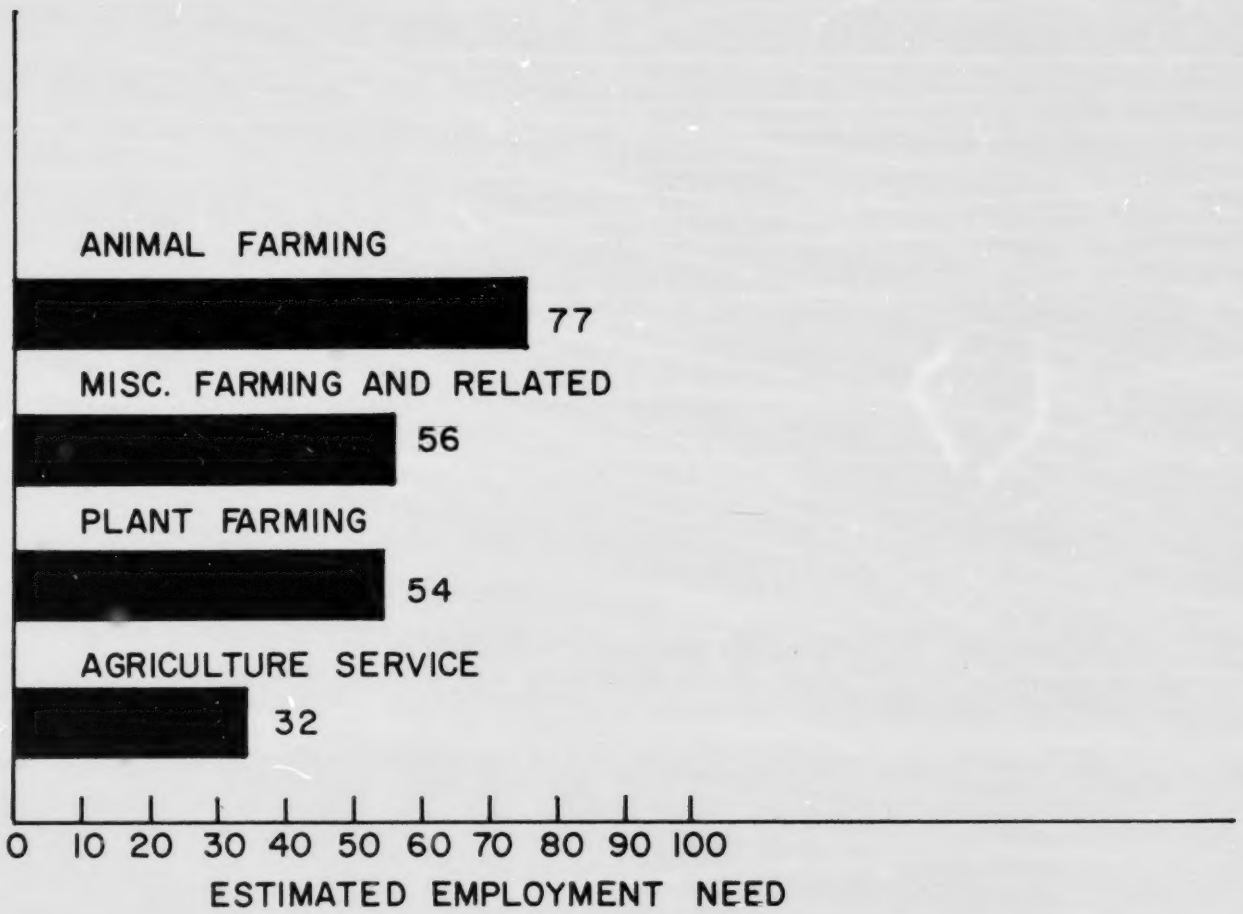


TABLE 23

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FOR MACHINE TRADES OCCUPATIONS

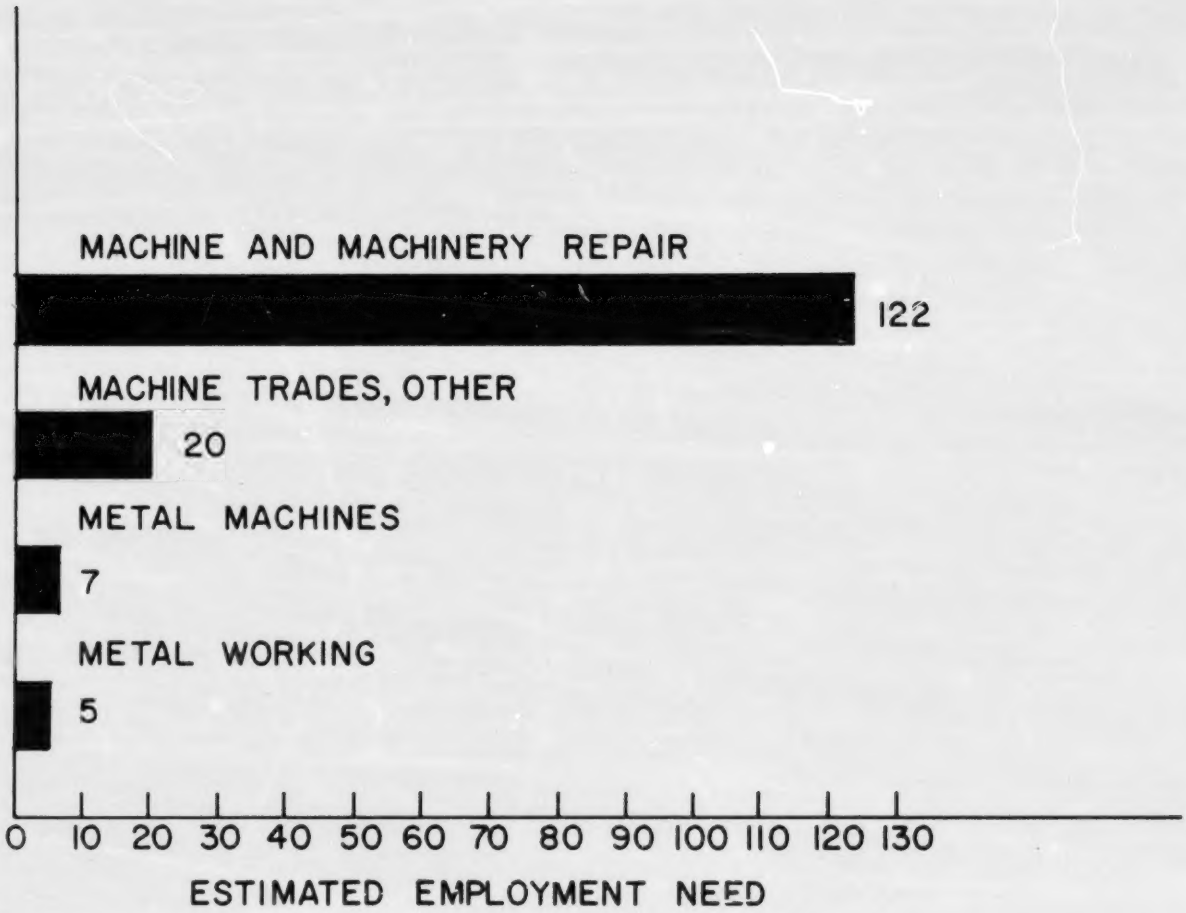
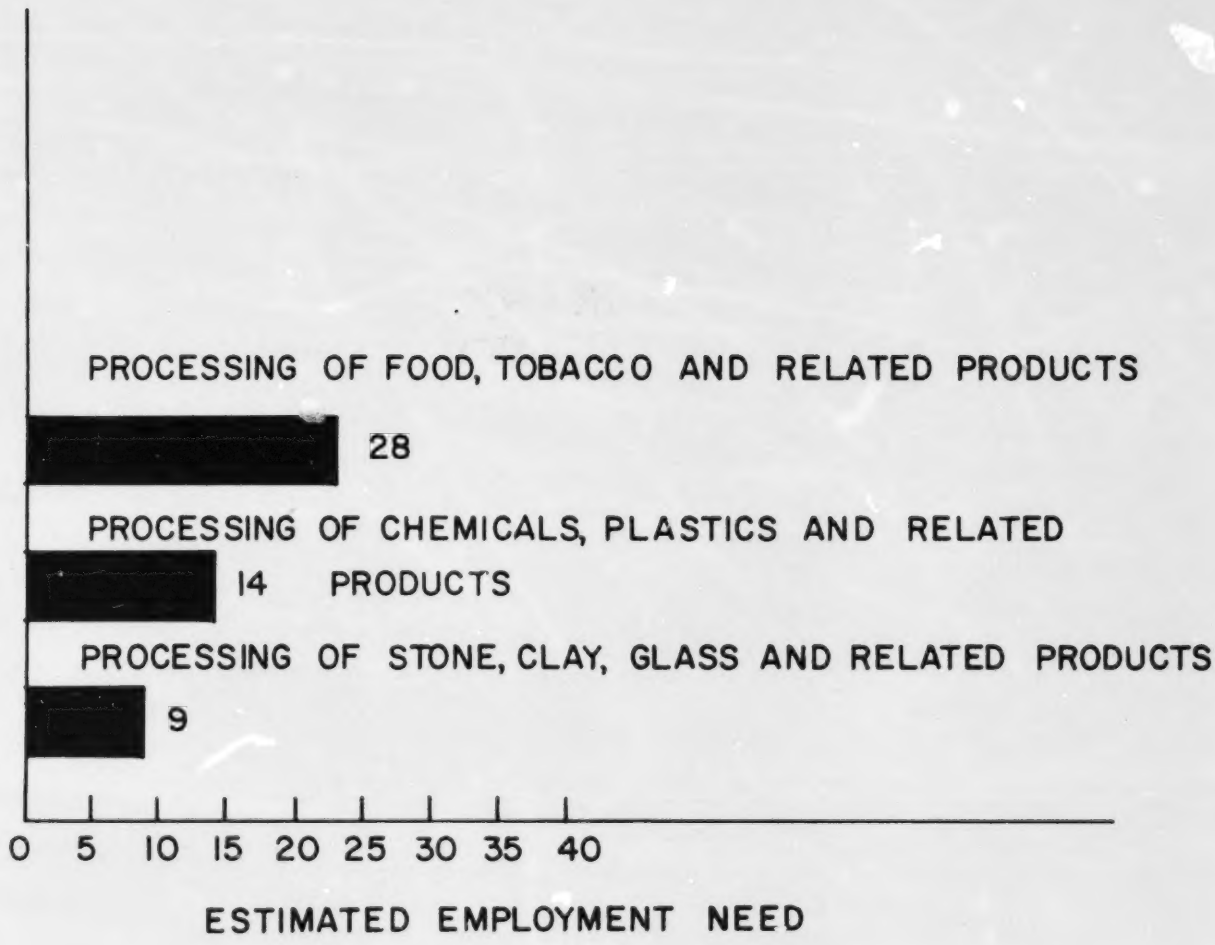


TABLE 24

TOTAL OF ESTIMATED EMPLOYMENT NEED FROM ALL SAMPLES FOR PROCESSING OCCUPATIONS


PROCESSING OF FOOD, TOBACCO AND RELATED PRODUCTS
28
PROCESSING OF CHEMICALS, PLASTICS AND RELATED PRODUCTS
14
PROCESSING OF STONE, CLAY, GLASS AND RELATED PRODUCTS
9
0 5 10 15 20 25 30 35 40
ESTIMATED EMPLOYMENT NEED

employment was Structural. The lowest need was in the Processing and Machine Trades areas.

In analyzing the occupational categories more closely (Tables 16-24), it was noted that the following 20 occupational groups in order of importance were the occupations indicating the highest need. Correspondingly, the appropriate occupational category, instructional program and estimated employment need was listed.

Occupational Group and Estimated Employment Need	Occupational Category	Instructional Program
1. Food and Beverage Preparation and Service (926)	Service	Food Services Waiter/Waitress Cook/Chef Baker Meat Cutter Food Management
2. Salesworkers and Salespersons, Commodaties (231)	Clerical and Sales	Apparel and Accessories General Merchandise Home Furnishings Hardware, Bldg. Materials, Farm and Garden Supplies & Equipment Automotive Industrial Marketing Wholesale Trade
3. Lodging and Related Service (186)	Service	Hotel and Lodging Institutional and Home Management
4. Misc. Personal Services (172)	Service	Nursing Assistance Medical Emergency Technician Physical Therapy Home Health Aide Care and Guidance of Children Agriculture Supplies/ Service

5. Computing and Account Recording (168)	Clerical and Sales	Bookkeepers Cashiers Tellers Computer and Console Operators General Merchandise Hotel and Lodging Keypunching & Coding Equipment Machine Operators Food Services General Office Clerks
6. Education (155)	Professional, Technical and Managerial	*(No identified instructional training program)
7. Medicine and Health (144)	Professional, Technical and Managerial	Ag. Supplies/Service Nursing Medical Lab Assisting Radiology Technology Inhalation Therapy Medical Assistant Dental Assisting Practical Nursing Surgical Technician
8. Machines and Machinery Repairs (122)	Machine Trades	Air Conditioning Mechanics Maintenance, Heavy Equipment Specialization, other Mechanics Agricultural Power and Machinery Diesel Mechanic Business Machine Maintenance Cooling Industrial Technology Construction and Maintenance Trades
9. Fabrication and Repair of Plastics Synthetics, Rubber and Related Products (116)	Bench Work	*(No identified instructional program)

10. Motor Freight (89)	Miscellaneous	*(No identified instructional program)
11. Construction (87)	Structural	Carpentry Plumbing and Pipe Fitting Construction and Maintenance Trades Glazing Roofing
12. Packaging and Materials Handling (80)	Miscellaneous	Food Distribution Retail Trade, other Hardware, Bldg. Materials, Farm and Garden Supplies Transportation
13. Animal Farming (77)	Farming, Fishery & Forestry	Animal Science
14. Transportation (76)	Miscellaneous	Transportation Petroleum Traffic, Rate & Transportation Clerk
15. Managers, Officials, (other) (74)	Professional, Technical and Managerial	Agriculture Supplies/ Service Farm Business Management Petroleum Transportation Wholesale Trade, Other General Merchandise Automotive
16. Electrical Assembly, Installing & Repairing (73)	Structural	Lineman Communications Electricity Electrical Appliance Appliance Repair
17. Excavating, Grading, Paving and Related Services (72)	Structural	Heavy Equipment Construction and Maintenance Trade
18. Building and Related Service (71)	Service	Custodial Services

19. Stenographic, Typing, Filing and Related Services (69)	Clerical and Sales	Secretarial Stenographers Typists Personal Assistants File Clerks Clerk-Typist Filing, Office Machines and General Office General Merchandise
20. Architecture and Engineering (63)	Professional, Technical and Managerial	Drafting Electronic Technology Instrumentation Technology Mechanical Technology

The occupational group of highest need was in the area of Food and Beverage-Preparation and Service. The corresponding instructional program would be in the general area of food service and food management. The next area of high need was in Sales with the appropriate instructional programs being in the areas of merchandising and marketing. Next in order of importance came the occupational areas of Lodging and Related Service, Miscellaneous Personal Service, Computing and Account Recording, Education, Medicine and Health, and Machines and Machinery Repairs. The corresponding instructional program areas were hotel and lodging; personal services in the Health Occupation areas such as nursing assistance, medical emergency technician, physical therapy and home health aide and personal services in the Agriculture area; accounting, computing, and business data processing in the Office Occupation area; no identified instructional program in the Education area; such areas as nursing, medical lab assisting, radiology technology, inhalation therapy, medical assisting, and dental assisting in the Health Occupation area; and such areas as air conditioning, coding, mechanics, and appliance

repair in Trades and Industry and industrial technology in the Technical area. Other occupational areas of need in order were fabrication and repair of plastics, synthetics, rubber and related products in the Bench Work area; construction, electrical assembly, installing and repairing, and excavating, grading, paving and related services in the structural area; motor freight, transportation, and packaging and material handling in Miscellaneous; animal farming in Agriculture; supervisory, administrative and management occupations, and architecture and engineering in the Professional, Technical and Managerial area; building and related services such as custodial in the Service area; and stenographic, typing, filing, and related services in the Clerical area.

Relationship of Vocational Interests with Occupational Opportunities

Presented in Table 25 are data showing the relationship of the vocational interest data with the occupational opportunities data. The occupational factor of greatest difference was the Farming, Fishing, Forestry, and Related area. There was a very high vocational interest shown by the students in this area but a low occupational opportunity need. For the Service and Clerical and Sales areas, there also appeared to be some differences. In both cases the factors had a higher need rank than interest rank.

There appeared to be a higher relationship between the ranking of the vocational interest factors of those students interested in the one- and two-year post-secondary programs and the occupational opportunity need data than the rankings for the vocational interest factors of the

TABLE 25

RELATIONSHIP OF VOCATIONAL INTEREST DATA WITH
THE OCCUPATIONAL OPPORTUNITIES DATA

Factor	Rank of vocational interest factors for total sample of students (9-12)	Rank of vocational interest factors for those students (9-12) indicating an interest in a one- or two-year post-secondary business, nursing, junior college, or vocational-technical program	Rank of occupational opportunity need categories
Farming, Fishery, Forestry, and Related	1	1	6
Professional, Technical, and Managerial	2	4	3
Service	3	2	1
Structural and Bench*	4	5	4 & 8
Clerical and Sales	5	3	2
Machine Trades	6	6	7
Processing	7	7	9
Miscellaneous**	-	-	5

*Structural and Bench were separate categories on the occupational opportunity need data. The corresponding ranks on the occupational opportunity need data were four and eight.
**Miscellaneous was not included as a factor in the vocational interest data.

total sample with the rankings of the occupational opportunity need data. In fact, if the Farming, Fishery, Forestry and Related factor ranking were not included and the Structural and Bench category were considered together as a rank of four, the order of the factors for one- and two-year post-secondary oriented students would be very similar to the occupational opportunity need data. This would tend to indicate that potential exists for the one- and two-year post-secondary institution in the Mid-Plains Community Technical College area to service a large share of the occupational opportunity need of the area utilizing the Mid-Plains area student if appropriate programs were offered.

Summary

The occupational opportunity need categories were in order of importance: Service; Clerical and Sales; Professional, Technical and Managerial; Structural; Miscellaneous; Farming, Fishery and Forestry; Machine Trades; Bench and Processing. The occupational groups of greatest need in order of importance were: Food and Beverage-Preparation and Service; Sales, Lodging and Related Services; Miscellaneous Personal Services; Computing and Account Recording; Education; Medicine and Health; Machines and Machinery Repairs; Fabrication and Repair of Plastics, Synthetics, Rubber and Related Products; Motor Freight; and Construction.

Concerning the relationship of the vocational interests factors with the occupational opportunity need categories, there was a high discrepancy on the Farming, Fishery, Forestry and Related Factor. There was also some discrepancy on the Service and Clerical and Sales factors. There was more similarity between the one- and two-year

post-secondary student ranked vocational interest factors and the occupational opportunity need data rankings than a similar comparison of rankings of the vocational interest factors utilizing the total sample of students.

CHAPTER VII

COOPERATIVE EDUCATION RESOURCE POSSIBILITIES IN THE MID-PLAINS NEBRASKA TECHNICAL COMMUNITY COLLEGE AREA

Upon completion of the occupational opportunities inventory, a Cooperative Education Resource Survey was administered to determine cooperative education alternatives which might be feasible to provide in cooperation with employers surveyed in this study. A copy of the instrumentation used is presented in Appendix H. Five hundred and twenty-four valid resource survey response instruments were obtained from the 827 employers interviewed. Of the non-responding group, most were small firms that did not respond because they felt that they were not in a position to provide a suitable cooperative education experience. Three items were concerned with minimal requirements for employment, ten items with possible cooperative education opportunities and one was open ended. The scale used for rating each of the ten items on cooperative education opportunities follows; (1) Would like to participate in this area; (2) Have an interest, but not sure about participation; and (3) Would not like to participate in any way. The data corresponding to the items on the Cooperative Education Resources Survey are contained in Tables 26, 27, 28, and 29, respectively.

The data presented in Table 26 relative to minimal educational requirements suggests that the majority of the employers did not have minimal educational requirements for employment. For those employers indicating that they had a requirement, the majority indicated that the student be a high school graduate and/or typically requested that the

TABLE 26

MINIMAL EDUCATIONAL REQUIREMENTS FOR EMPLOYMENT WITH THE FIRM OR ORGANIZATION

ITEM: Do you have minimal educational requirements for employment with your firm or organization?

Yes--157 No--291 No Response--76

Requirement	No. of Responses*
Sophomore or Junior in High School	6
High School graduate	77
1-2 years of voc-tech or bus. school	13
4-6 years of college	28
Clerical or Sales experience	18
Machine trades, processing, structural or benchwork skills	13
Service training	14
Farming or Ranching experience	10
Other	3
	182

*Some employers indicated multiple requirements depending on the employment position.

student have some experience or skill in the employment area. Of the 524 respondents, only 41 indicated that completion of two or more years of a formal program were required for employment.

The data in Table 27 on minimal age requirements showed the majority of the employers had either no minimal age requirement or requested one of at least 16-18 years of age. Approximately twelve percent indicated a 19-21 age requirement.

The data displayed in Table 28 on possible cooperative education opportunities with the firm or organization showed that employers with 25 or more employees showed more interest and willingness to participate than the employers with fewer than 25 employees. The area of greatest interest for both large and small firms was in the area of making available opportunities for meaningful field trips. Other areas of highest interest for both large and small firms, in rank order, were item 6; reporting employment needs; item 2; providing personnel to talk to interested students; item 4; providing a student part-time, on-site work experience; and item 5; providing a student on-site career awareness opportunities. The large firms also indicated a moderate degree of interest and participation in providing in-service experiences for teachers, counselors, and administrative staff from the area community colleges so that they might become more aware of the needs associated with particular career areas. Concerning the formation of an advisor committee and/or industry/education council, the large firms indicated an interest, but were not sure about participation. The item of least interest for the large firms was the item on providing a student a mini-course in a career area. For the small firms, there were two items of least interest

TABLE 27

MINIMAL AGE REQUIREMENT FOR EMPLOYMENT
WITH FIRM OR ORGANIZATION

ITEM: Please indicate the minimum age for employment.

Age Requirement	No. of Responses
NONE	89
11-15	22
16-18	242
19-21	50
22-30	10
Other	3
	416

TABLE 28

POSSIBLE COOPERATIVE EDUCATION OPPORTUNITIES WITH THE FIRM OR ORGANIZATION*

Item	Mean score of employers with less than 25 employees (n=445)	Mean score of employers with with 25 or more employees (n=79)	Mean score for all employers (n-524)
1. Making available opportunities for meaningful field trips to my business	1.92	1.51	1.85
2. Provide personnel to talk to interested students about my business and its career potential.	2.10	1.68	2.03
3. Providing a student or students mini-course in a career area.	2.42	2.20	2.38
4. Providing a student or students a part-time, on-site work experience opportunities.	2.09	1.77	2.04
5. Providing a student or students part-time, on-site career awareness opportunities.	2.19	1.86	2.14
6. Reporting the employment needs of my business to a student placement service at my area community college.	2.02	1.49	1.94

TABLE 28 continued

Item	Mean score of employers with less than 25 employees (n=445)	Mean score of employers with with 25 or more employees (n=79)	Mean score for all employers (n=524)
7. Providing in-service experience for teachers, counselors, and administrative staff from the area community college, so they might become more aware of the needs associated with a particular career area.	2.30	1.87	2.23
8. Helping to form an industry/ education council to broaden community involvement in cooperative education.	2.34	2.06	2.30
9. Participation in programs that would involve the exchange of some resources, such as facilities, personnel, equipment, and time.	2.43	2.00	2.36
10. Serving on a Community Cooperative Education Advisory Committee to coordinate available community resources with education programs.	2.40	2.07	2.35

*The mean scores presented in the table were based on a three point scale where a one indicated a willingness to participate, a two an interest, but not sure about participation, and a three indicated that the employer would not like to participate in any way.

and they were participation in programs that would involve the exchange of some resources, such as facilities, personnel, equipment and time and the mini-course item.

Concerning the question on general comments, the data presented in Table 29 showed that the employers were somewhat concerned about a need for teaching the students more about how to meet and work with people. The other comments were quite diverse, touching on a number of specific types of employment needs.

In summary, the data in this section showed there would be little to no problem concerning minimal educational or age requirements for cooperative education students. Concerning participation in cooperative education opportunities, employers showed a moderate interest, particularly the large firms. The areas of highest interest were for making available opportunities for meaningful field trips, providing personnel to talk to students, reporting employment needs and providing opportunities for work experiences and career awareness.

TABLE 29

GENERAL COMMENTS CONCERNING COOPERATIVE EDUCATION POSSIBILITIES WITH THE FIRM OR ORGANIZATION

GENERAL COMMENTS
. Call us when ever you need any help.
. Great need in this area for home builders.
. Need a program in waitress, bus boys, etc.
. Visitation from college groups should be by appointment.
. Visitation limited to schools and business organizations.
. Employees need primary skills (reading and writing).
. We are too small to do any good.
. Self-employed (one person operation).
. Need to have 399 Machine Training. Need to have Technologist Training.
. Need managerial training--Need interplay between Labor Department and College Placement Office. Need knowledge of college potential in secretarial area.
. Need improvement of personnel, leadership problems, how to handle people.
. Need managers trained for cafes, bars, etc.
. We have had some bad experiences with high school field trips and are reluctant to get involved at this time.
. Restaurant industry needs more trained personnel (Cooks, waitresses, bartenders, etc.).
. Teach kids more background on what it takes to run a business.
. Need to teach how to meet and deal with people.

CHAPTER VIII

A PLAN FOR THE PROVISION OF COOPERATIVE EDUCATION IN THE MID-PLAINS NEBRASKA TECHNICAL COMMUNITY COLLEGE AREA

A plan for the provision of cooperative education programs to serve the Mid-Plains Technical Community College area has been presented in the form of a series of findings, conclusions and recommendations. These findings, conclusions and recommendations are intended to serve as guidelines in the identification of what needs to be done in the development of a comprehensive program of cooperative education to serve the study area. As far as the "how" is concerned, it is suggested that this be treated as a discrete problem for each individual institution, and that any plan adopted should provide a functional approach to that particular situation. The position taken here has been to suggest the utilization of the information and rationale presented in previous chapters of this study as alternatives from which the most appropriate answers can be selected. No attempt has been made to offer prescriptive solutions to meet individual institutional requirements, but rather to provide information relative to what should and needs to be done in any given institutional setting.

The basic format of this chapter includes the following: (1) findings and conclusions relative to cooperative education programs; (2) findings and conclusions relative to vocational education programs; (3) findings and conclusions concerning occupational opportunities available in the Mid-Plains Technical Community College area; and (4) general recommendations concerning future action relative to the provision of cooperative education and program development in the Mid-Plains Technical Community College area.

Findings and Conclusions Concerning Cooperative Education In Mid-Plains Technical Community College Area

Based on the review of related studies and literature, the key issues and concerns involving cooperative education programs were found to be: planning, coordination and orientation of staff prior to implementation; determination of need, objectives and content of program; delineating the role and function of program coordinator; selection and orientation of students, formulating a work/study plan; selecting criteria for determining academic credit; identifying appropriate administrative organizational relationships; criteria for selecting the work station; providing necessary equipment and facilities; developing financial plan and cost estimate; developing institutional policies and written agreements; determining the nature and function of the advisory council; defining appropriate public relations procedures; and developing appropriate evaluation procedures.

Findings and conclusions related to the above areas were formulated and are reported under the following headings.

Initial Planning

1. In the area of preliminary planning, coordination, and orientation of staff, the following steps need to be taken prior to making any attempts to implement cooperative education programs:

    a. Visit successful cooperative education programs offered in other institutions.

    b. Secure a commitment from the institution to support cooperative education type programs.

    c. Select and train the necessary program coordinators.

    d. Begin new programs with a small group of selected students.

Determination of Program Objectives and Content

2. Specific and defined program objectives stem from several sources--the student, the teacher-coordinator, and the business/industrial jobs. For specific types of program objectives see Table 2. Procedures for the development of a program of studies should include task analysis and the considered judgment of the professionals in the field.

Role of Program Coordinator

3. The employment of an able, enthusiastic teacher-coordinator may be the most important single factor once the decision is made to provide cooperative education programs. The coordinator employed should possess industrial experience as well as be able to communicate effectively with campus colleagues.

4. The coordinator's function should include identifying, planning, developing, and coordinating the supervision and evaluation of the cooperative education program.

Selection and Orientation of Student

5. Initial assessment of students for possible participation in cooperative education programs should be followed by intensive orientation which would include in-depth interviewing and counseling. It was further concluded that a cooperative education student handbook be developed as an invaluable counselor aid. Such a handbook should contain detailed descriptions of all elements of the program including job descriptions of student, coordinator, employer, and overall evaluation procedures.

6. Student trainees should be provided learning experiences which hold promise of enabling them to be tolerant of the needs, values, and personal characteristics of co-workers, supervisors, and customers.

7. Student trainees initially should enter the job with basic skills and specialized competencies necessary to prevent them from experiencing failure and equip them to experience achievement, recognition, and responsibility in their training.

8. Students who show satisfactory acadmic progress in at least 6-8 credits should be placed on internship following an interview with the coordinator.

Work/Study Plan

9. Work/study plans should have maximum flexibility to fit the variety of needs of students and employers.

10. The alternating semester programs (wherein students are full-time students one semester and full-time employees the subsequent semester) were probably the most satisfactory arrangement.

Academic Credit

11. It was concluded that academic credit should be given in cooperative education work/study plans. Typically the student received up to three or four hours of credit per semester, if the job was related to his occupational goal, with a maximum of sixteen hours credit toward graduation.

Administrative Organizational Relationships

12. Depending on the size of the institution, the program coordinator may report directly to the dean of instruction or report to a dean or a

supervisor of co-op education, who then would report to the dean of instruction. The supervisors may be department chairpersons or may be separate positions, again depending on the size of the co-op programs. It was concluded that the dean of instruction should be administratively responsible to assure the academic status of the cooperative education programs. See the literature (Chapter 2) for a thorough discussion concerning the various organizational alternatives.

Selecting Work Stations

13. Criteria for the selection of the work station for cooperative education programs should include the following:

a. The work station should meet the student's needs.

b. Interested employers should be involved in the selection.

c. A variety of work stations should be available.

d. Activity at the work station should provide the student a salary.

Equipment and Facilities

14. Although no special equipment or facilities beyond what would normally be provided for a quality technical program was deemed necessary to conduct a cooperative education program, special consideration should be given to location and access.

Financing and Costs

15. It was concluded that in general cooperative education programs cost no more than regular academic programs. When credit was given in

work/study plans, the cost per student remained about the same. An additional fee was used by some institutions for students enrolled in the cooperative education program.

Policies and Agreements

16. Several possible types of cooperative agreement forms were utilized. One institution also had cooperative education policies (see Appendix A). It was concluded that institutions should refer to the literature for model contracts and agreement forms.

Advisory Councils

17. The post-secondary institutions included in this study need to be concerned about the basic make-up and function of the various advisory committees.

18. The type, size and functions of the advisory council should be organized in accordance with established guidelines for such committees and be varied depending on the administration's philosophy and scope of the program.

Public Relations

19. Public relations programs may well include the following activities:

a. Breakfasts with employers.

b. Appreciation dinners.

c. News releases.

d. Issue certificates, letters, newsletters, etc.

Evaluation

20. Both the coordinator and employer should evaluate the student trainee using a standard form which would include quality and quantity of work performed, work habits, attitudes, and attendance.

Other

21. Effective, successful cooperative education programs gave positive results for the college; successful programs tended to enhance community support for the college, aided in recruiting good students, and served to stimulate students to do good work. Graduates of successful cooperative education programs secured jobs readily.

FINDINGS AND CONCLUSIONS CONCERNING VOCATIONAL EDUCATION IN THE MID-PLAINS TECHNICAL COMMUNITY COLLEGE AREA

Vocational Interest

1. Despite an interest level of 87 percent by students in grades 9-10 and 84 percent by students in grades 11-12, only about one-third of the students were enrolled in vocational or business oriented programs. It was concluded that either such programs were not available to all students or that they were not adequately counseled.

2. Future enrollments in post-secondary vocational-technical and business schools were highly related to the early identification of students who frequently enrolled in vocational preparation programs in the secondary schools. This conclusion was based on the high percentage of students who were enrolled in such programs in grades 9 through 12 along with a similar percentage indicating an interest in post-secondary vocational-technical and business schools.

3. Considerable student interest was expressed in a broad spectrum of occupations that could be offered through one- and two-year post-secondary school programs. Of particular interest were areas oriented toward people, agriculture, instructive services, customer services, skilled personal services, promotion and communication, management and supervision, and artistic, musical and literary areas.

4. In grouping the interest occupations under general categories, the top ranking interest area was Farming-Fishery-Forestry, followed

in order by Professional, Technical and Managerial, Service, Structural, Bench, Clerical and Sales, Machine Trades, and Processing.

Work Values

5. The work values of the students seemed to be materialistic in nature and indicated an orientation toward visible and tangible results. Way of Life, Economic Return, Achievement, Supervisory Relations and Security were among the higher ranking values selected by students. Two distinct groups of students each with a unique set of work values were interested in attending the post-secondary institution. The single group whose work values included Way of Life, Achievement, and Supervisory Relations was interested in the Training, Teaching, Nursing, Care of People and Animals, and Customer Service type occupations; and the other group whose work values included Economic Return and Security were more interested in the applied, technical, and machine oriented areas. These student work values should be reflected in the types of programs offered by the one- and two-year post-secondary colleges who are interested in attracting both groups of students.

FINDINGS AND CONCLUSIONS CONCERNING OCCUPATIONAL OPPORTUNITIES IN THE MID-PLAINS TECHNICAL COMMUNITY COLLEGE AREA

Occupational Need

1. The greatest occupational need was in the category of Services followed by Clerical and Sales, Professional, Technical and Managerial, Structural, Miscellaneous, Farming-Fishery-Forestry, Machine Trades, Bench and Processing. The occupational need categories were somewhat different in order in comparison to the vocational interests rankings

particularly the categories of Farming-Fishery-Forestry, Service, Clerical and Sales. When the vocational interest factors of only those students interested in the one- and two-year post-secondary programs were compared with the occupational need data, greater similarities existed, although the factor of Farming-Fishery-Forestry still showed considerable difference between need and interest. It was concluded that potential exists for the one- and two-year post-secondary institutions in the Mid-Plains Community Technical College areas to provide service for a large share of those businesses in the area who have occupational opportunity needs by utilizing the Mid-Plains area students if appropriate programs are offered in the Service area, the Clerical and Sales areas, and in the Medicine and Health area of the Professional, Technical and Managerial occupational category.

a. It was concluded that programs in the Service area are needed in the following categories: Food and Beverage Preparation and Service, Lodging and Related Services including institutional and home management, and Miscellaneous Personal Services such as nursing assistance, medical technicians, physical therapy, home health aide, care and guidance of children and agriculture supplies/services.

b. In the Clerical and Sales areas it was concluded that a need existed for training of sales oriented individuals in the program areas of apparel and accessories, general merchandise, home furnishings, hardware and building materials and farm and garden supplies and equipment, automotive, industrial

marketing, and wholesale trade, and in the office occupations area of computing and account recording.

c. In the Professional, Technical and Managerial area it was concluded that there was a need for individuals trained in nursing, medical lab assisting, radiology technology, inhalation therapy, medical assistants, and surgical technicians.

Employment Pattern and Need

2. The employment patterns and the need patterns were found to be similar. The major difference was in the Service area where the data suggested a significant increase in services would be needed during the next three years, particularly in the food and beverage preparation and service area. The other category of need which showed a sizeable increase over present employment was in the structural area. Again it was concluded that the highest need exists for training programs in the food and beverage area such as food distribution, food services, food management, waiter/waitress, cook/chef, baker and meat cutter.

Participation by Business and Industry

3. It was concluded that much work needs to be done to increase the concern and willingness of employers of the area to become involved in cooperative education programs.

4. The greatest opportunity for early results rests with employers of 25 or more employees.

5. Concerning possible participation in cooperative education by employers, areas of moderate interest included making available

opportunities for meaningful field trips, providing personnel to talk to students, reporting employment needs, and providing opportunities for work experience and career awareness.

RECOMMENDATIONS FOR FUTURE ACTION

1. It is recommended that officials of the Mid-Plains Technical Community College area provide leadership in assisting secondary schools of the area in reviewing the adequacy of their occupational education and vocational counseling programs.

2. It is recommended that this study be used as a basis for further planning to provide for a wider range of training programs at the post-secondary school level. Further, it is recommended that efforts be made to coordinate the cooperative education programs offered by the three colleges of the Mid-Plains Nebraska Technical Community College area in order to develop a unified plan to best meet the program needs that exist in the Service, Sales and Clerical, Professional, Technical and Managerial areas.

3. It would appear that there was a sufficient student base and need in the Mid-Plains Technical Community College area to justify the provision of a comprehensive program of cooperative education. It is, therefore, recommended that the occupational assessment and pupil enrollment data obtained through this study be utilized by the Area Board to justify program requests to the State Board of Technical Community Colleges.

4. There appears to be definite advantages associated with sponsoring effective and successful cooperative education programs. It is,

therefore, recommended that the Mid-Plains Technical Community Colleges continue to expand their efforts to develop comprehensive programs of cooperative education.

5. It is recommended that the data presented in this study be organized and stored in such a manner so that further analyses for program planning can take place and so that the central administration can obtain access to data needed for decision-making. It is further recommended that the types of data presented in this study be collected periodically so that analyses of program data related to needs of the area can take place on a continuing basis.

APPENDICES

APPENDIX A

INSTITUTIONAL COOPERATIVE EDUCATION POLICIES

ACADEMIC AND COOPERATIVE EDUCATION POLICIES

GRADING SYSTEM

The grade of "U" of "F" or a similar perjorative symbol is excluded from LaGuardia's grading system. LaGuardia does not use a grade point equivalent on the student's transcript.

There are three passing grades:

(E) excellent
(G) good
(P) pass

There are two non-passing grades:

(N) no credit
(I) incomplete

Other symbols which may appear on the student's transcript are:

(Z) indicates instructor failed to submit grade
($) indicates exempted credit
(#) indicates transfer credit
(@) indicates waiver of requirement (no credit is awarded)

THE N GRADE

(N) is used when an instructor evaluates a student's work as not as yet meeting the standards for the course. Ordinarily the student would be expected to retake the necessary classwork. A student who has received an (N) twice for the same course must consult with and receive permission from the Division Chairman or his designee before attempting the course again.

THE I GRADE

An (I) can be changed to a passing grade during the following two quarters. The grade cannot be converted beyond this time except in cases where the instructor grants an extension which may not exceed one additional quarter. If a change of grade is not submitted by the end of three quarters, the (I) grade automatically converts to an (N). Instructors giving (I) grades should inform students in writing of the conditions under which they may receive passing grades. (Special forms are available in the offices of the Division Chairman). Instructors are expected to keep a copy of the communication for at least three quarters following the assignment of the grade. A copy is to be sent to the Division Chairman and to the Registrar.

CHANGE OF GRADE

A student who desires to change a grade gets in touch with his instructor to discuss the grade. If no equitable solution is reached, the student may then go to the instructor's Division Chairman for consultation. If, after further consultation no agreement is reached, the student has the option of appealing the case in writing and appearing before the Academic Standing Committee, indicating his reasons for appeal. The decision of the Academic Standing Committee is final.

COOPERATIVE EDUCATION GRADES

Students receive grades for Cooperative Education internships according to the LaGuardia grading system as outlined above. The internship coordinator is responsible for determining the grade. In grading, he takes into consideration his own observation, employer evaluation and practicum grade. Appeal on grades is first to the internship coordinator. Further appeal is to the Dean of Cooperative Education or his designee. Final appeal is to the Academic Standing Committee.

WITHDRAWAL FROM COURSES

When a student withdraws from a course before the end of the fifth week (not including Intensive Week), no record of this will appear on his permanent record. A student withdrawing thereafter will receive NO CREDIT (N) grade.

WITHDRAWAL FROM COOPERATIVE EDUCATION

Termination or withdrawal from a Cooperative Education internship is subject to the approval of the student's coordinator, with the five-week (six weeks in a quarter, which includes an Intensive Week) grace period NOT to be considered as applicable to withdrawal from Cooperative Education. It is recognized that termination of employment may be due to a variety of justifiable reasons. Therefore, each case will be handled by the internship coordinator, subject to normal grading procedures of review and appeal of Cooperative Education grades.

EXEMPTION CREDITS

Students with demonstrated competence in specific areas may be granted credit for courses related to the area, in any event not to exceed a total of 10 credits towards graduation. (Credits obtained through transfer from other collegiate institutions or in Cooperative Education are in addition to the ten exemption credits mentioned above).

Exemption credit from any course offered at LaGuardia may be granted on the basis of an examination or other project equivalent to the final requirement of the course, to be designed by members of the appropriate Division or Department and approved by the Chairman. To receive credit by exemption, the student should apply to the appropriate Division Chairman or his designee.

No exemption credit can be granted for any course previously counted as part of a program for which a degree has been awarded at this or any other institution of higher education.

EXEMPTION CREDITS IN COOPERATIVE EDUCATION

All full-time matriculated students must meet the 9 credit* Cooperative Education requirement. A maximum of three Cooperative Education credits may be granted as advanced standing.

To be eligible to receive credit for previous experience, a student must

1. be a fully matriculated student,

2. have successfully completed at least 12 credits at LaGuardia (A student may apply for the credit before completing the twelve (12) credits).

3. apply to his Cooperative Education Coordinator for said credit. Final decision is made by the Dean of Cooperative Education or his designee.

WAIVERS

A student may obtain a waiver (without credit) for a course when the chairman of the appropriate division, or his designee, determines that such a waiver is warranted. The divisional chairman will advise the Registrar to note the waiver on the student's transcript.

MATRICULATION STATUS - FULL-TIME DAY STUDENTS

At the end of his fourth quarter, a full-time Day Session freshman must have completed a minimum of twenty-one (21) credits in order to maintain matriculation status. At the end of his eighth quarter, a full-time Day Session student must have completed a minimum of forty-two (42) credits in order to maintain matriculation status.

The student can appeal loss of matriculation to the Chairman of the Academic Standing Committee. Once the Academic Standing Committee has made its decision, there is routine notification to the Admissions Office, the Registrar, the Dean of Student Services, the Dean of Faculty, and the Dean of Cooperative Education--covering all students who have become non-matriculated.

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*The Cooperative Education requirement for the Educational Associate Program is twelve (12) credits.

A Day Session student who loses his matriculation status can reapply for it after completing six (6) credits successfully at an approved or accredited college. Such students can enroll at LaGuardia as non-matriculants for some or all of those six (6) credits. Application for reinstatement of matriculation status is done through the Admissions Office. Unless an application is filed with - and accepted by - the Admissions Office, the student will remain a non-matriculant.

MATRICULATION STATUS - PART-TIME EXTENDED DAY STUDENTS

A student who enters LaGuardia as a non-matriculated student must accumulate six (6) passing credits and provide proof of a high school diploma or an equivalency diploma in order to be eligible for matriculation.

At the end of his fourth quarter, after achieving matriculation status, a part-time matriculated student must have completed a minimum of nine (9) credits (in addition to the six (6) credits earned for initial matriculation status) in order to maintain matriculation status.

At the end of his eighth quarter after achieving matriculation, a part-time matriculated student must have completed a minimum of eighteen (18) credits (in addition to the six (6) credits earned for initial matriculation status) in order to maintain matriculation status.

Exemption credits and advanced standing credits do not apply to the above. The student may appeal loss of matriculation to the Chairman of the Academic Standing Committee. The initial requests should be made through the Extended Day Office.

TRANSFER

A currently matriculated student in good academic standing at another unit of the City University will maintain his matriculation status if he is admitted to LaGuardia as a transfer student or as an Extended Day student. The acceptance of students requesting transfer to LaGuardia is determined by the availability of seats and budget considerations.

Credit is granted for courses taken and passed at other accredited colleges. Credit is granted for courses comparable to those meeting the degree requirements of the student's curriculum. The determination of comparability is vested in the Divisions involved. The number of transfer credits granted toward a degree shall not exceed 30.

LaGuardia Community College will allow for transfer purposes the number of credits originally granted for a course given by the college from which a student has come.

TRANSFER CREDITS IN HEALTH EDUCATION

Transfer credit will be granted for course work taken in Health Education at other institutions of higher education. The Natural Environment Division will be responsible for approving transfer credits in Health Education, transfer credits so approved substituting for Liberal Arts electives only.

No decision has been made at this time in regard to Physical Education pending a decision on the development of such programs at LaGuardia.

TRANSFER CREDITS IN RELIGIOUS STUDIES

Transfer credit may be granted for theological or religious courses where those courses come under the heading of philosophy. This judgement shall be made by the Chairman of the Language and Culture Division.

TRANSFER CREDITS IN COOPERATIVE EDUCATION

Transfer credit can be granted for Cooperative Education courses for which credit has been granted at another college. The number of credits transferred cannot exceed three (3). The determination of comparability is made by the Dean of Cooperative Education. Transfer students without Cooperative Education credit are required to fulfill the three internship Cooperative Education requirements.

MATRICULATED STUDENTS TAKING COURSES OUTSIDE LAGUARDIA

Students currently matriculated at LaGuardia Community College who wish to take courses elsewhere (either during their internship or during the study quarter) should be advised by their counselors. Permission signatures must be obtained from the appropriate Division Chairman and the student's counselor before a LaGuardia permit for registration can be issued.

ATTENDANCE

As a general rule, attendance in class is a requirement and will be considered in the evaluation of student performance. Specific attendance requirements are determined by the individual divisions and will be communicated to the students on the first day of class.

LEAVE OF ABSENCE

Regular Leave: Students whose leave of absence is less than one year (with the exception of military service) will be guaranteed readmission subject to space availability. The Admissions Committee will make the decision in exceptional cases. A request for a leave of absence should be made through the student's counselor.

Medical Leave: Students should be allowed to take a Medical Leave of Absence, with no penalty for courses dropped, upon certification by the College Director of Health Services. The Director can require written proof from the student's physician.

LEAVE OF ABSENCE - COOPERATIVE EDUCATION

Though a student may take a leave of absence, he still remains in his initial "A" or "B" pattern. Students planning to return to the college during an internship phase must contact the Cooperative Education Division at least five weeks prior to the beginning of the term, or have made prior arrangements.

CREDIT BANK

Students not enrolled at LaGuardia may store credits for college level courses which they have taken and passed under the auspices of LaGuardia. Should such students wish to enroll elsewhere, their records shall be forwarded in the usual manner by the Registrar to the institution they plan to attend.

COOPERATIVE EDUCATION POLICIES*

INTERNSHIP REQUIREMENT

As part of the requirements for the LaGuardia degree, all Day students are required to fulfill successfully three Cooperative Education internships. Three credits are awarded for each internship. (For an appeal mechanism, see catalogue section under WAIVERS and under EXEMPTION CREDITS IN COOPERATIVE EDUCATION).

PATTERN ASSIGNMENT

Early in the first quarter of matriculated study, the students are placed by random selection in either "A" or "B".** Students can petition the Division of Cooperative Education for a change of pattern during the first quarter. At the end of the first quarter, all students will have their final pattern placement.

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*These policies apply to full-time day students and part-time Extended Day students who choose to participate in the Cooperative Education Program.

**Exceptions may be made in the case of certain categories of students in specialized career areas (Secretarial Science, for example), where placement is according to degree preparation.

PLACEMENT SEQUENCE

The student's first internship follows either his second or third study quarter (according to placement pattern "A" or "B".*** All Day students will be pre-registered for Cooperative Education according to their placement pattern. They must go out accordingly. Students who do not go out on schedule (for reasons which have not received the Cooperative Education Division's approval) will still be registered for Co-op and will receive an automatic (N). In special cases, students may be allowed to depart from the pattern assignment. Appeal is to the Chairman of the Cooperative Education Committee.

PREREQUISITES TO INTERNSHIPS

1. Prior to their first internship, students should have completed CSE 102 and NEM 101 or have received waivers.

2. Prior to their first internship, students must go through a certification process which may include: attendance at required orientation sessions, ability to interview satisfactorily, appearance for required interviews with the Cooperative Education coordinator. Responsibility for certification rests with the Cooperative Education coordinator. Appeal is to the Dean of Cooperative Education (or designee).

3. To be placed on an internship, students should show evidence of satisfactory academic progress, in general completing at least six (6) credits by the end of their first quarter, twelve (12) credits by the end of their second quarter, and for "B" pattern students, eighteen (18) credits by the end of their third quarter.

TAKING OF COURSES DURING AN INTERNSHIP QUARTER

Students taking their internships can take academic course work. Students must receive approval from a faculty advisor at registration. (It is generally felt inadvisable for students to take more than six (6) credits of academic course work during an internship (quarter).

Students who have not gone out on an internship according to their assigned pattern, (for reasons which have not received the Cooperative Education Division's approval) are limited to taking courses in the Extended Day Program, after 5 P.M. or on Saturdays. Registration is dependent upon space availability. Special arrangements to take courses in the regular Day program require the permission of the Dean of Cooperative Education (or designee). Registration is dependent upon space availability.

***Variations in the placement sequence may be proposed by the Dean of Cooperative Education (or designee). For the Cooperative Education internship model in Human Services, see catalogue section under HUMAN SERVICES PROGRAM.

Students who have not gone out on an internship according to their assigned pattern for reasons which have received the Cooperative Education Division's approval, may take courses at any time. (See also catalogue section under MATRICULATED STUDENTS TAKING COURSES OUTSIDE LAGUARDIA).

THE PRACTICUM

Part of the internship requirement is the successful completion of a practicum. The practicum is normally taken during the internship quarter. In special cases, the Cooperative Education coordinator can approve taking the practicum in the subsequent study quarter. Appeal and/or special arrangements can be made through the Dean of Cooperative Education (or designee).

CONDITIONS FOR FULFILLING THE COOPERATIVE EDUCATION REQUIREMENT

1. A student must receive credit in each of three internships.

2. The Division of Cooperative Education does not place or grant further Cooperative Education credit to a student who has received two (N) grades in internships. Appeal can be made to the Chairman of the Academic Standing Committee.

3. A student must satisfactorily complete the practicum to receive Cooperative Education credit. If he does not, but does pass the internship component, he received an (I). To change the (I) to a passing grade: 1) The student whose practicum grade is (N) must repeat the practicum in the subsequent quarter; 2) The student whose practicum grade is (I) must complete outstanding assignments by the end of the following two quarters. Appeal is first to the practicum facilitator. Further appeal is to the internship coordinator. Still further appeal is to the Dean of Cooperative Education (or designee). Final appeal is to the Chairman of the Academic Standing Committee.

COOPERATIVE EDUCATION REQUIREMENT FOR EXTENDED DAY STUDENTS*

The requirement for Cooperative Education is optional for part-time matriculated Extended Day students. Non-Matriculated students are not eligible to participate in the Cooperative Education program. A part-time matriculated Extended Day student may take electives which may include Cooperative Education internships and practicums.

Upon receiving matriculation status, the Extended Day student has to decide whether he wishes to pursue his studies as a full-time or a

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*Policy is subject to review by January 15, 1974. Students admitted to the college via Extended Day prior to December 1972 may be excused from the Cooperative Education requirement in view of the fact that the policy was unclear at the time of their admission.

part-time student. If he chooses the part-time option, the policy pertaining to Cooperative Education as outlined above is applicable. If he chooses the full-time option, then all policies (including Cooperative Education policies) governing full-time day students, pertain to him. (See catalogue section on ACADEMIC AND COOPERATIVE EDUCATION POLICIES).

An Extended Day student who chooses to participate in the Cooperative Education Program is eligible to begin his first internship upon successful completion of twelve (12) credits.

TRANSFER BETWEEN EXTENDED DAY AND DAY SESSIONS

Any student may transfer once from one category to another (full-time Day to part-time Extended Day, and vice versa). To do so, he must see his counselor and fill out an appropriate form.

Students who transfer from part-time Extended Day to full-time Day are then subject to any additional degree or matriculation requirements affecting the category of full-time Day students.

Students transferring from Day to Extended Day become subject to Extended Day matriculation requirements. They are still, however, subject to all the degree requirements affecting Day students, including Cooperative Education. Waivers are possible in special circumstances. Requests for waivers should be directed to the Dean of Cooperative Education (or designee). In any transfer, the Academic Standing Committee must be notified.

The Extended Day counselor or director may permit a student to take a full-time load without transferring to the full-time Day Session category, for one to every four quarters of enrollment. Students wishing to do so more than once must automatically transfer to the full-time Day Session category, or they may petition the Ad Hoc Committee on Adults for exceptions to this policy.

COOPERATIVE EDUCATION PLAN AND PROCEDURES FOR EXTENDED DAY STUDENTS

Extended Day students who take the Co-op option are entitled to be placed on internships by the Division of Cooperative Education. Most Extended Day students are currently employed and prefer to use their own present employment to fulfill the Cooperative Education requirement.

The students will receive an announcement regarding their pattern assignment. (See paragraph on "Pattern Assignment" under "Cooperative Education Policies").

The students will also receive an announcement regarding a date on which to contact their Cooperative Education Coordinator. At that meeting, students will either select an internship or begin to set learning objectives which apply to their present employment (which will be considered their internship for credit purposes.)

All students must complete the requirement to have an educational framework for their internship, which is normally carried out by the practicum seminar. Other arrangements in lieu of the practicum, however, are possible by special arrangement with their coordinator.

(For further elaboration on the Cooperative Education plan and procedures, see entire catalogue section titled COOPERATIVE EDUCATION POLICIES).

APPENDIX B

VOCATIONAL-TECHNICAL PROGRAM OFFERINGS (1974-75) IN THE MID-PLAINS NEBRASKA TECHNICAL COMMUNITY COLLEGE AREA#

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VOCATIONAL-TECHNICAL PROGRAM OFFERINGS (1974-75) IN THE MID-PLAINS NEBRASKA TECHNICAL COMMUNITY COLLEGE AREA#

O.E. Code	Program	McCook Jr.	Mid-Plains Tech.	N. Platte Jr.
01.0000	AGRICULTURE			
01.0100	Agriculture Production	1	A	
01.0200	Agricultural Supplies/ Services	1		
01.0200	Agri-Business Technology		A	
01.0202	Feeds	1		
01.0603	Soil	1		
04.0000	DISTRIBUTION AND MARKETING			2-A*
04.0100	Advertising Services			
07.0000	HEALTH OCCUPATIONS			
07.0101	Dental Assistant		[illegible]	
07.0299	Medical Laboratory Technology		P	P
07.0302	Practical (Vocational) Nursing		1**	
07.0303	Nursing Assistant (Aid)		A	
07.0603	Optometric Assistant		1-A**	
07.0908	Food Service Supervisor		A	
09.0000	HOME ECONOMICS			
09.0103	Clothing and Textiles	1		
09.0104	Consumer Education	A		

O.E. Code	Program	McCook Jr.	Mid-Plains Tech.	N. Platte Jr.
09.0106	Family Relations	1		
09.0107	Foods and Nutrition	1		
09.0108	Home Management	1		A
09.0199	Special Problems			A
09.0202	Clothing Mgt., Production, and Services	1		A
09.0203	Food Mgt., Production and Services	1		
14.0000	OFFICE OCCUPATIONS			
14.0100	Accounting and Computing	2	1-A	2-A
14.0200	Business Data Processing System	1	1-A*	
14.0300	Filing, Office Machines, and General Office Clerical Occupations	1	1-A	2-A
14.0302	File Clerks			2-A
14.0700	Stenographic, Secretarial and Related Occupations	1-2	1-A	
14.0702	Secretaries		1-A	
14.0800	Supervisory & Admin. Management Positions		A	2-A
14.0900	Typing and Related Occupations	1-2	1-A	1-2-A*
14.0901	Clerk-Typists		1-A	1-2-A
14.0902	Typists		1-A	1-2-A

O.E. Code	Program	McCook Jr.	Mid-Plains Tech.	N. Platte Jr.
16.0000	TECHNICAL			
16.0103	Architectural Tech. (Bldg. Con.)		2-A	
16.0106	Civil Technology		A	
16.0107	Electrical Technology		A	
16.0108	Electronic Technology		2-A	
16.0109	Electromechanical Technology		2-A	
16.0111	Industrial Technology		2-A	
16.0113	Mechanical Technology		2-A	
16.0503	Teacher's Aide	1-2		
16.0601	Commercial Pilot Training	2-A	A	
16.0602	Fire & Fire Safety Technology		A	
16.0605	Police Science Technology	2		
17.0000	TRADES AND INDUSTRY			
17.0100	Air Conditioning		2-A*	
17.0101	Cooling	A	2-A	
17.0102	Heating		2-A	
17.0103	Ventilating (Filtering and Hum.)		2-A	
17.0200	Appliance Repair	A	2-A	

O.E. Code	Program	McCook Jr.	Mid-Plains Tech.	N. Platte Jr.
17.0301	Body and Fender		1-A	
17.0302	Mechanics		2-A*	
17.0402	Aircraft Operations	1-2-A	A	
17.0500	Blueprint Reading		A	
17.1000	Construction and Maintenance Trades		1-2-A*	
17.1001	Carpentry		1-2-A	
17.1004	Masonry		1-2-A	
17.1005	Painting and Decorating		A	
17.1007	Plumbing and Pipefitting		A	
17.1008	Dry-Wall Installation		A	
17.1099	Cement Masons, Floor Construction Combined		1-A	
17.1100	Custodial Services	A	A	
17.1200	Diesel Mechanic		2-A*	
17.1300	Drafting	1-A	2-A*	
17.1400	Electrical Occupations		A	
17.1401	Industrial Education		A	
17.1402	Lineman		A	
17.1500	Electronics Occupations		2-A*	
17.1501	Communications		2-A	
17.1502	Industrial Electronics		2-A	
17.1503	Radio/Television		2-A	

O.E. Code	Program	McCook Jr.	Mid-Plains Tech.	N. Platte Jr.
17.1700	Foremanship, Sup. and Mgt. Dev.	1-2		
17.1900	Graphic Arts Occupations		A	
17.1903	Lithography, Photography, and Platemaking	A	A	
17.2302	Machine Shop		2-A*	
17.2303	Machine Tool Operation		2-A	
17.2305	Sheet Metal		A	
17.2306	Welding and Cutting		1-2-A*	
17.2801	Fireman Training		A	
17.2802	Law Enforcement Training	1-2		
17.2899	REA Safety		A	
17.2903	Meat Cutter		P	
17.3100	Sinael Engine Repair (int. comb.)	A	A	
17.3399	Textile Prod. and Fabrication, other		A	
17.3500	Upholstering		A	
17.3601	Millwork and Cabinet Making		2-A	
17.3699	Woodworking, other		A	A

1--One year or less 2--Two years or less A--Adult P--Proposed
*--Cooperative Education programs
**--Cooperative Education programs but students receive no pay for work

APPENDIX C

TWO YEAR COLLEGE CO-OP EDUCATION
"BEST PRACTICES" QUESTIONNAIRE

THE UNIVERSITY OF NEBRASKA-LINCOLN
LINCOLN, NEBRASKA 68508

TEACHERS COLLEGE
DEPARTMENT OF
EDUCATIONAL ADMINISTRATION

May 31, 1974

Dear Co-op Program Coordinator:

The Mid-Plains Nebraska Technical Community College area consisting of North Platte Junior College, McCook Junior College and Mid-Plains Nebraska Technical College is considering the implementation of the Co-op Program into the instructional sequence. To help in the facilitation of the implementation the Mid-Plains Nebraska Technical Community College area has elicited the services of the Bureau of Educational Research and Field Services and the Vocational Research Coordinating Unit both of Teachers College of the University of Nebraska - Lincoln. As a first step it was decided to identify what are considered to be some of the "best practices" in exemplary Co-op Programs in two-year colleges. The colleges being contacted are those listed in the Handbook of Cooperative Education in the discussion on exemplary programs in two-year colleges and those that participated in the recent Tenth International Conference for Cooperative Education.

We would appreciate any suggestions or comments which you might have concerning "best practices" for the enclosed key issues relative to Two-Year College Co-op Programs. If within the next week you could find time to respond to the questionnaire and mail it back in the self-addressed envelope, we would be most appreciative. Thank you.

Sincerely,

Gerald R. Boardman

Gerald R. Boardman
Project Coordinator
Bureau of Educational Research
and Field Services

njb

Enclosure

TWO-YEAR COLLEGE CO-OP EDUCATION
"BEST PRACTICES" QUESTIONNAIRE

Instructions:

We would appreciate any suggestions or comments which you might have concerning "best practices" for the following key issues relative to Two-Year College Co-op Programs. Please feel free to comment on as many issues on which you feel knowledgeable concerning "best practices". In responding, reflect in terms of on-going practice in your college and/or your personal knowledge.

Name_____

Position_____

School_____

Do you wish a copy of the final report?

Yes___ No___

1. Organizational Chart. Administrative organizational relationship of Program Coordinator to (a) Dean of Faculty, (b) Dean of Student Services, and (c) Divisional Chairman.

2. Work/Study Plan. (e.g., alternate semester, parallel half-day, evening, ...)

3. Academic Credit. (If yes, criteria to determine amount of credit given; assignments, final reports, ... to supplement work experience)

4. Advisory Council. (Number, make-up, functions)

5. Work Station. (Criteria for selection)

6. Public Relations. (e.g., breakfast with employers, appreciation dinners,...)

7. Program and Staffing. (Determination of need; objectives, content,...; qualifications of program coordinator.)

8. Coordinator Function (e.g., assessing student needs, selection of job sites,...)

9. Student. (Selection, orientation, counseling, basic entry skills,...)

10. Evaluation. (Student progress, supervision of academic and work experience)

11. Special Equipment, Facilities. (Coordinator's office, classroom furnishings, simulated work stations,...)

12. Legal, Technical Matters. (Institutional policies, written agreements, legal obligations,...)

13. Financing, Costs. (Additional/less cost to institution, student, employer.)

14. Preliminary Planning, Coordination, Orientation of staff prior to implementation.

15. Other.

APPENDIX D

MEAN RESPONSES OF THE HIGH SCHOOL STUDENTS TO THE OVIS SCALES CODED BY JOB TITLE, DOT, AND WORKER-TRAIT GROUP

5 = I would like this activity very much.

4 = I would like this activity.

3 = I am neutral. I would neither like nor dislike this activity.

2 = I would dislike this activity.

1 = I would dislike this activity very much.

Scale 1 - Manual Work. Unskilled use of tools and routine work usually done by hand.

Job Title	DOT Code	Worker Trait Group	Mean
Deckhand	552.887	Handling	1.882
Packager, Hand	920.887	Handling	2.230
Harvest Hand	404.887	Handling	2.433
Assembler-Bundler	784.887	Handling	2.001
Construction Worker	869.887	Handling	2.019
Machine Feeder	619.886	Feeding-Offbearing	2.208
Tree Pruner	404.884	Manipulating	2.300
Packager, Machine	920.885	Tending	2.205
Cement-Mason Helper	844.887	Handling	2.052
Cement Loader and Sacker	922.885	Tending	1.999
Janitor	382.884	Manipulating	1.907
		Average	2.112

Scale 2 - Machine Work. Operating and adjusting machines used in processing or manufacturing.

Job Title	DOT Code	Worker Trait Group	Mean
Grinder	603.782	Operating-Controlling	2.231
Tractor-Trailer-Truck Driver	904.883	Driving-Operating	2.820
Set-up Man	617.780	Set-up and Adjustment	2.347
Machine Assembler	638.781	Precision Working	2.327
Welding Machine Operator	810.782	Operating-Controlling	2.377
Longshoreman	911.883	Driving-Operating	2.351
Mold Maker	769.781	Precision Working	2.352
Asphalt-Paving Machine Operator	853.883	Driving-Operating	2.357
Rubber-Goods Cutter-Finisher	690.780	Set-up and Adjustment	2.235
Bolt-Machine Operator	612.782	Set-up and Adjustment	2.200
Bulldozer Operator	850.883	Driving-Operating	2.501
		Average	2.373

Scale 3 - Personal Services. Providing routine services for people as a waiter, waitress, usher, household worker, etc.

Job Title	DOT Code	Worker Trait Group	Mean
Lounge-Car Attendant	291.858	Selling	2.548
Hostess, Restaurant	310.868	Accommodating Work	2.601
Launderette Attendant	369.877	Misc. Customer Service	2.177
Doorman	324.878	Ushering, Messenger Service	2.103
Waitress, Waiter	311.878	Misc. Personal Service	2.466
Maid, General	306.878	Misc. Personal Service	2.125
Telegraph Messenger	230.868	Ushering, Messenger Service	2.654
Ticket Taker	344.868	Ushering, Messenger Service	2.506
School-Crossing Guard	371.868	Signaling	2.436
Checkroom Attendant	358.878	Misc. Personal Service	2.281
Counterman, Cafeteria	311.878	Misc. Personal Service	2.338
		Average	2.385

Scale 4 - Care of People and Animals. Routine work related to the day-to-day needs of people or animals.

Job Title	DOT Code	Worker Trait Group	Mean
Nurse Aid	355.878	Child and Adult Care	2.637
Companion	309.878	Child and Adult Care	2.883
Orderly	355.878	Child and Adult Care	2.932
Nurse Aid	355.878	Child and Adult Care	3.158
Animal Keeper	356.874	Animal Care	3.301
Nursemaid	307.878	Child and Adult Care	3.016
Animal Caretaker	356.874	Animal Care	2.986
Pet Shop Attendant	356.877	Animal Care	3.332
Playroom Attendant	359.878	Child and Adult Care	2.748
Practical Nurse	354.878	Child and Adult Care	2.314
Aquarist	356.874	Animal Care	2.873
Tray-Line Worker	355.878	Child and Adult Care	2.557
Orderly	355.878	Child and Adult Care	2.776
Vet-Hospital Attendant	356.874	Animal Care	3.294
		Average	2.915

Scale 5 - Clerical Work. Typing, recording, filing, IBM keypunching, and other clerical or stenographic work.

Job Title	DOT Code	Worker Trait Group	Mean
General Clerk	209.588	Routine Checking, Recording	2.628
Stenographer	202.388	Stenographic	2.405
General Clerk	209.588	Routine Checking, Recording	2.596
File Clerk	206.388	Classifying, Filing	2.535
Addresser, Clerical	209.588	Typing	2.409
File Clerk	206.388	Classifying, Filing	2.552
Typist	203.588	Typing	2.584
Cataloger	100.388	Classifying, Filing	2.402
Mail Clerk	231.588	Routine Checking, Recording	2.484
Pay-Roll Clerk	215.488	Computing	2.721
Transcribing-Machine Operator	208.588	Typing	2.524
		Average	2.531

Scale 6 - Inspecting - Testing. Sorting, measurings, or checking products and materials; inspecting public facilities.

Job Title	DOT Code	Worker Trait Group	Mean
Weaving Inspector	683.684	Sorting, Inspecting, Measuring	2.154
Sorter	222.687	Sorting, Inspecting, Measuring	2.378
Leaf Sorter	529.687	Sorting, Inspecting, Measuring	1.989
Fire Inspector	379.387	Inspecting and Stock Checking	2.414
Film-Library Clerk	223.387	Inspecting and Stock Checking	2.441
Glass Inspector	579.687	Sorting, Inspecting, Measuring	2.222
Finished-Stock Inspector	763.687	Sorting, Inspecting, Measuring	2.405
Brick Tester	579.384	Inspecting and Stock Checking	2.108
Final Inspector, Paper	539.387	Inspecting and Stock Checking	2.170
Meter Inspector	710.384	Inspecting and Stock Checking	2.202
Grader	589.687	Sorting, Inspecting, Measuring	2.243
Inspector, Tin Can	709.387	Inspecting and Stock Checking	1.970

Scale 6 continued

Job Title	DOT Code	Worker Trait Group	Mean
Grader, Meat	525.387	Inspecting and Stock Checking	2.453
Quality-Control Girl	529.387	Inspecting and Stock Checking	2.174
Leather Grader	789.387	Inspecting and Stock Checking	2.250
		Average	2.238

Scale 7 - Crafts and Precise Operations. Skilled use of tools or other equipment as in the building trades, machine installation and repair, or the operation of trains, planes, or ships.

Job Title	DOT Code	Worker Trait Group	Mean
Cabinetmaker	660.280	Set-up machine operation	2.960
Glass Bender	772.381	Craftsmanship	2.657
Motion Picture Projectionist	960.382	Motion Picture Projecting	2.619
Household Appliance Installer	827.381	Craftsmanship	2.093
Watchmaker	715.281	Craftsmanship	2.281
Bricklayer - Structural	861.381	Craftsmanship	2.622
Electrician	824.281	Craftsmanship	2.422
Watch Assembler	715.381	Craftsmanship	2.291
Control-Room Technician	957.282	Radio, Television Transmitting	2.460
Aircraft-and-Engine Mechanic	825.381	Craftsmanship	2.422
Refrigeration Mechanic	637.281	Craftsmanship	2.281
Electric-Tool Repairman	729.281	Craftsmanship	2.322
Automobile Service Mechanic	620.381	Craftsmanship	2.705
		Average	2.472

Scale 8 - Customer Services. Conducting business relations with pupils as in retail selling, accepting reservations, receiving payments, or providing information.

Job Title	DOT Code	Worker Trait Group	Mean
Information Operator	235.862	Switchboard Service	2.677
Guide	353.368	Information Gathering, Dispensing Verifying	3.082
Travel Clerk	242.368	Information Gathering, Dispensing, Verifying	3.075
Personal Shopper	296.358	Demonstration and Sales Work	2.658
Customer-Service Specialist	299.368	Information Gathering, Dispensing, Verifying	2.702
Receptionist	237.368	Information Gathering, Dispensing, Verifying	2.733
Cashier	211.468	Cashiering	2.443
Ticket Agent	919.368	Facilities, Services, Movement Allocating	2.591
Transportation Agent	912.368	Facilities, Services, Movement Allocating	2.945

Scale 8 continued

Job Title	DOT Code	Worker Trait Group	Mean
Sales Attendant	290.468	Customer Service	2.543
Hotel Clerk	242.368	Facilities, Services, Movement Allocating	2.701
		Average	2.741

Scale 9 - Nursing and Related Services. Providing services as a nurse, physical therapist, x-ray or medical laboratory technician, or dental hygienist.

Job Title	DOT Code	Worker Trait Group	Mean
Medical Assistant	079.368	Nursing, X-ray	2.769
Inhalation Therapist	079.368	Nursing, X-ray	2.714
Physical Therapist	079.378	Nursing, X-ray	3.010
Nurse, Licensed, Practical	079.378	Nursing, X-ray	2.638
Nurse, Licensed, Practical	079.378	Nursing, X-ray	2.930
Nurse, General Duty	075.378	Nursing, X-ray	2.714
Dental Assistant	079.378	Nursing, X-ray	2.532
Nurse, Office	075.378	Nursing, X-ray	2.524
Surgical Technician	079.378	Nursing, X-ray	2.601
Nurse, General Duty	075.378	Nursing, X-ray	2.578
Nurse, General Duty	075.378	Nursing, X-ray	2.629
		Average	2.694

Scale 10 - Skilled Personal Services. Providing skilled services to people such as tailoring, cooking, barbering, or hair dressing.

Job Title	DOT Code	Worker Trait Group	Mean
Barber	330.371	Beautician and Barbering	2.268
Cosmetologist	332.271		
Pastry Cook	313.381	Cooking	2.918
Barber	330.371	Beautician and Barbering	2.136
Cosmetologist	332.271		
Alteration Tailor	785.281	Craftsmanship	2.335
Hair Stylist	332.271	Beautician and Barbering	2.573
Seamstress	785.381	Craftsmanship	2.173
Pizza Baker	313.381	Cooking	3.091
Barber	330.371	Beautician and Barbering	2.506
Cosmetologist	332.271		
Cook	313.381	Cooking	2.502
Restaurant Cook	313.381	Cooking	2.559
Restaurant Cook	313.381	Cooking	2.448
		Average	2.501

Scale 11 - Training. Instructing people in employment or leisure-time activities. Also includes animal training.

Job Title	DOT Code	Worker Trait Group	Mean
Horse Trainer	159.228	Animal Training	3.268
Instructor, Flying	196.228	Flight Training	3.279
Recreation Leader	195.228	Miscellaneous Instructive Work	2.772
Dog Trainer	159.228	Animal Training	3.334
Instructor, Bus Driver	919.228	Industrial Training	2.531
Instructor, Charm Course	099.228	Miscellaneous Instructive Work	2.851
Instructor, Apparel Manufacture	789.228	Industrial Training	2.898
Instructor, Auto Driving	099.228	Miscellaneous Instructive Work	2.925
Camp Counselor	159.228	Miscellaneous Instructive Work	2.982
Instructor, Charm Course	099.228	Miscellaneous Instructive Work	2.410
Camp Counselor	159.228	Miscellaneous Instructive Work	2.895
Airplane Stewardess, Chief	166.228	Business Training	2.872
Police Academy Instructor	375.228	Industrial Training	2.668
Police Academcy Instructor	375.228	Industrial Training	3.119
		Average	2.915

Scale 12 - Literary. Writing novels, poetry, reviews, speeches or technical reports; editing, or translating.

Job Title	DOT Code	Worker Trait Group	Mean
Copy Writer	132.088	Creative Writing	2.971
Literary Writer	130.088	Creative Writing	2.721
Copy Writer	132.088	Creative Writing	2.822
Translator	137.288	Translating and Editing	2.406
Poet	130.088	Creative Writing	2.632
Editorial Assistant	132.288	Translating and Editing	2.569
Writer, Technical Publications	139.288	Technical Writing	2.295
Historian	052.088	Social Science, Psychology	2.284
Poet	130.088	Creative Writing	2.459
Critic	132.088	Creative Writing	2.617
Literary Writer	130.088	Creative Writing	2.370
		Average	2.559

Scale 13 - Numerical. Using mathematics as in accounting, finance, data processing, or statistics.

Job Title	DOT Code	Worker Trait Group	Mean
Actuary	020.188	Math, Physical Science	2.187
Business Programmer	020.188	Math, Physical Science	2.817
Meteorologist	025.088	Math, Physical Science	2.453
Tax Accountant	160.188	Accounting, Auditing	2.273
Machine-Processing Accountant	160.188	Accounting, Auditing	2.567
Loan Officer	186.288	Accounting, Auditing	2.395
Statistician, Applied	020.188	Math, Physical Science	2.446
Mathematical Technician	020.188	Math, Physical Science	2.489
Theoretical Physicist	023.088	Math, Physical Science	2.381
Auditor	160.188	Accounting, Auditing	2.524
Business Programmer	020.188	Math, Physical Science	2.584
		Average	2.465

Scale 14 - Appraisal. Determining the efficiency of industrial plants and businesses, evaluating real estate, surveying land, or conducting chemical and other laboratory tests.

Job Title	DOT Code	Worker Trait Group	Mean
Gemologist	199.281	Materials Analysis	2.780
Industrial Health Engineer	012.188	Industrial Engineering	2.671
Surveyor	018.188	Surveying, Prospecting	2.732
Methods Engineer	012.188	Industrial Engineering	2.433
Radiation Monitor	199.187	Appraising and Investing	2.576
Chemical-Lab Technician	022.281	Materials Analysis	2.382
Traffic Technician	199.288	Industrial Engineering	2.507
Chemist, Water Purification	022.281	Materials Analysis	2.562
Estimator	160.288	Industrial Engineering	2.873
Manufacturing Engineer	012.187	Engineering	2.366
Taster	529.281	Materials Analysis	2.512
		Average	2.543

Scale 15 - Agriculture, Farming, Forestry, Landscaping, or the related fields of botany and zoology.

Job Title	DOT Code	Worker Trait Group	Mean
Horticulturist	040.081	Scientific Research	2.900
Forester	040.081	Scientific Research	3.241
Cattle Rancher	413.181	Cropping, Animal Farming, Gardening	2.748
Landscape Gardener	407.181	Cropping, Animal Farming, Gardening	3.036
Poultryman, Eggs	412.181	Cropping, Animal Farming, Gardening	2.518
Dairy Farmer	411.181	Cropping, Animal Farming, Gardening	2.798
Grain Farmer	401.181	Cropping, Animal Farming, Gardening	2.837
Fish Farmer	436.181	Cropping, Animal Farming, Gardening	2.895
Orchardist	404.181	Cropping, Animal Farming, Gardening	2.633
Soil-Fertility Expert	040.081	Scientific Research	2.602
Cattle Rancher	413.181	Cropping, Animal Farming, Gardening	2.963
		Average	2.834

Scale 16 - Applied Technology. Application of engineering principles and scientific knowledge to the design of structures and machines.

Job Title	DOT Code	Worker Trait Group	Mean
Mechanical Engineering Technician	007.181	Technical Work, Engineering	2.753
Photogrammetrist	018.281	Drafting	2.553
Civil Engineer	005.081	Engineering Research	2.690
Rocket Engine Test Engineer	003.081	Engineering Research	2.438
Structural Draftsman	005.281	Drafting	2.678
Electronic Engineer	003.181	Engineering Research	2.503
Nuclear Engineer	015.081	Engineering Research	2.546
Geologist	024.081	Scientific Research	2.781
Acoustics Physicist	023.081	Scientific Research	2.663
Highway Engineer	005.081	Engineering Research	2.477
Architect	001.081	Engineering Research	2.803
		Average	2.626

Scale 17 - Promotion and Communication. Advertising, publicity, radio announcing, journalism, news information service, interviewing, recruiting and also providing legal services as a judge or lawyer.

Job Title	DOT Code	Worker Trait Group	Mean
Reporter	132.268	News Reporting	2.600
Survey Worker	249.268	Interviewing, Information Giving	2.982
Announcer	159.148	Radio Announcing	2.681
Lawyer	110.108	Legal	2.780
Claims Taker, Unemployment	169.268	Interviewing, Information Giving	2.389
Business Agent	191.118	Contract Negotiating	2.345
Public Relations Man	165.068	Promotion and Publicity	2.279
Public Relations Man	165.068	Promotion and Publicity	2.735
Policewoman, Patrolman	375.268	Investigating, Protecting	2.919
Lawyer	110.108	Legal	2.972
News Analyst, Broadcast	131.068	Journalism and Editorial	2.801
		Average	2.680

Scale 18 - Management and Supervision. Administrative or supervising positions, such as a shop foreman, supervisor, school administrator, police or fire chief, head librarian, executive hotel manager, or union official. Includes owning and managing a store or business.

Job Title	DOT Code	Worker Trait Group	Mean
Stenographic Pool Supervisor	209.138	Supervisory Work	2.692
City Manager	188.118	Administration	2.526
Assembly Line Foreman	729.138	Supervisory Work	2.955
Production Foreman	699.138	Supervisory Work	2.950
Branch Manager	183.118	Administration	2.876
Personnel Manager	166.118	Administration	2.572
Production Coordinator	221.168	Scheduling, Dispatching	2.296
Production Superintendent	183.118	Administration	2.439
Lodging Facilities Manager	320.137	Supervisory Work	2.666
Food Service Supervisor	319.138	Supervisory Work	2.794
Store Manager	185.168	Managerial Work	2.640
		Average	2.673

Scale 19 - Artistic. Interior decorating, display work, photography, commercial and creative art work, or artistic restoration.

Job Title	DOT Code	Worker Trait Group	Mean
Clothes Designer	142.081	Art Work	2.963
Illustrator	141.081	Art Work	2.642
Furniture Designer	142.081	Art Work	3.110
Cloth Designer	142.081	Art Work	2.715
Interior Designer	142.051	Decorating and Art	3.048
Commercial Photographer	143.062	Photography, Motion Pictures	2.906
Commercial Designer	142.081	Art Work	2.869
Sculptor	148.081	Art Work	2.634
Painter	144.081	Art Work	2.710
Commercial Photographer	143.062	Photography, Motion Pictures	2.777
Cartoonist	144.081	Art Work	2.747
		Average	2.829

Scale 20 - Sales Representative. Demonstrating and providing technical explanations of products or services to customers, selling and installing such products or services, and providing related technical assistance.

Job Title	DOT Code	Worker Trait Group	Mean
Securities Salesman	251.258	Demonstration and Sales	2.501
Insurance Salesman	250.258	Demonstration and Sales	2.380
Special Service Representative	003.151	Sales Engineering	2.466
Industrial Power Engineer	003.151	Sales Engineering	2.399
Sales Representative	254.258	Demonstration and Sales	2.663
Broker	162.158	Purchase and Sales	2.311
Office Machine Salesman	281.358	Demonstration and Sales	2.479
Home Service Representative	278.258	Demonstration and Sales	2.355
Service Engineer	639.251	Sales and Service	2.265
Industrial Relations Salesman	252.158	Purchase and Sales	2.357
Precision Instrument Salesman	284.258	Demonstration and Sales	2.424
Heating Engineer	007.151	Sales Engineering	2.322
Pharmaceutical Detail Man	266.158	Purchase and Sales	2.563
Buyer	162.158	Purchase and Sales	2.470
Real Estate Salesman	250.358	Demonstration and Sales	2.577
		Average	2.436

Scale 21 - Music. Composing, arranging, conducting, singing or playing instruments.

Job Title	DOT Code	Worker Trait Group	Mean
Popular Singer	152.048	Musical Work, Vocal	3.169
Choirmaster	152.048	Musical Work, Vocal	2.895
Music Director	152.048	Musical Work, Instrumental	2.727
Orchestra Leader	152.048	Musical Work, Instrumental	3.011
Concert Singer	152.048	Musical Work, Vocal	2.910
Popular Singer	152.048	Musical Work, Vocal	2.848
Composer	152.088	Musical Work, Creative	2.483
Arranger	152.088	Musical Work, Creative	2.625
Composer	152.088	Musical Work, Creative	2.740
Musical Entertainer	152.048	Musical Work, Instrumental	2.803
Musician, Instrumental	152.048	Musical Work, Instrumental	2.555
		Average	2.797

Scale 22 - Entertainment and Performing Arts. Entertaining others by participating in dramatics, dancing, commedy routines, or acrobatics.

Job Title	DOT Code	Worker Trait Group	Mean
Actor	150.048	Dramatics	2.939
Story Teller	150.048	Creative Entertainment	2.705
Impersonator	159.048	Creative Entertainment	2.689
Comedian	159.048	Creative Entertainment	2.658
Magician	159.048	Creative Entertainment	2.476
Actor	150.048	Dramatics	2.594
Acrobat	159.248	Amusement and Entertainment, Physical	2.631
Actor	150.048	Dramatics	2.534
Dancer	151.048	Rhythmics	2.409
Skater	153.348	Amusement and Entertainment, Physical	2.636
Actor	150.048	Dramatics	2.829
		Average	2.645

Scale 23 - Teaching, Counseling, and Social Work. Providing instruction or other services to schools, colleges, churches, clinics, or welfare agencies. Includes instruction in art, music, ballet, or athletics.

Job Title	DOT Code	Worker Trait Group	Mean
Secondary School Teacher	091.228	High School, College, University	2.573
Psychologist	045.108	Guidance and Counseling	3.230
Elementary School Teacher	092.228	Kindergarten, Elementary School	2.799
College Faculty Member	090.228	High School, College, University	2.801
Secondary School Teacher			
Vocational Training Instructor	097.228	Vocational Education	2.675
Physical Education Instructor	153.228	Physical Education	3.264
Elementary School Teacher	092.228	Kindergarten, Elementary School	3.193
Counselor	045.108	Guidance and Counseling	2.945
Secondary School Teacher	091.228	High School, College, University	2.385
Technical Education Teacher	090.228	High School, College, University	2.835
Adult Education Teacher	099.228	High School, College, University	2.529
		Average	2.839

Scale 24 - Medical. Providing medical, surgical, or related services for the treatment of people or animals.

Job Title	DOT Code	Worker Trait Group	Mean
Audiologist	079.108	Medical, Veterinary	2.733
Orthodontist	072.108	Medical, Veterinary	2.295
Radiologist	070.108	Medical, Veterinary	2.832
Surgeon	070.101	Surgery	2.525
Surgeon	070.101	Surgery	2.469
Optometrist	079.108	Medical, Veterinary	2.656
Opthalmologist	070.108	Medical, Veterinary	2.531
Orthopedic Surgeon	070.101	Surgery	2.473
Pediatrician	070.108	Medical, Veterinary	2.648
Dermatologist	070.108	Medical, Veterinary	2.517
Dentist	072.108	Medical, Veterinary	2.184
		Average	2.533

APPENDIX E

OCCUPATIONAL OPPORTUNITY ASSESSMENT INTERVIEW GUIDE

Name of Interviewer

Consecutive Number

Firm Name

Street Address City

Person Interviewed Telephone

Job Description

Date of Interview Primary Function of Firm

A	C/N	D. O. T. Number	H. E. W. #	Now Employed	Next 12 Months: Total Needed	Next 12 Months: Reason for Need: Exp.	Next 12 Months: Reason for Need: Ret.	Next 12 Months: Reason for Need: Pro.	Next 12 Months: Reason for Need: Turn.	Following Two Years
1	2 3 4 5	6 7 8 9 10 11 12 13 14	15 16 17 18 19 20	21 22 23 24	25 26 27 28	29 30 31	32 33 34 35	36 37 38 39	40 41 42 43	44

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APPENDIX F

LIST OF THE 827 EMPLOYERS INTERVIEWED

EMPLOYERS INTERVIEWED

Ace Hardware
Ache and Paine Barbers
Achtor, Nelson
Adams, Allen W.
Agri Systems Inc.
Allen Self Serv Drug
Ahlmeyer, Harvey
Aladdin's Lamp Salon
Alice's Powed Puff
American Legion Post 203
Anderson, Harry
Anderson, Henry
Anderson, Milton D.
Anderson Oil Co.
Andrews Ranch
Andy's Dist. Co.
Annison's
Ann's Lounge
Applegate Inc.
Armknecht, Carl
Armstrong and Sons
Armstrong, Clayton
Arnold Animal Clinic
Arnold Drug
Arnold Electric
Arnold Elevator Co.
Arnold State Bank
Athey, Marvin
Authur Cafe
Avco Finance Co.

Badgley, Glen
B and J Supply, Inc.
Bardsley, Richard
Barnhart, A. B.
Batty, Mrs. John L.
Bayne Seed and Supply
Beach, Otis W.
Beal Enterprise Inc.
Beard, Leo
Beatty, Archie E.
Beatty, Morgan
Beaumonts Seamless
Beaver Telephone Answering Service
Beavers, Ronald
Becton-Dickinson and Co.
Benjamin, Kasl, and Associates
Benkleman Cemetery
Benkelman Sales Co. Inc.
Benkelman School IA
Brogan, Bernard
Berndt, Mary
Beshaler Gravel Co. and Farm
Best and Wilcox
Bill's Marine
Bill's Repairing and Service
Birdwood Products Co.
Bishop, A. M.
Blank, Don S.
Bloomberg, Roger
BPO Elks #985
BPO Elks #1434
Bob Clapp Electrical Service
Bostwick, Ivan
Bob's Auto Hospital
Bob's Station
Bohlke, Lawrence
Bonner, Margaret
Bordwski, Edward M.
Boyer, Wayne A.
Brady Bank
Branigan, Gerald
Brase Distr. Co.
Brass, Wendall
Bremer, Ben
Bringelson, Alvin N.
Broadway Market
Broken Bow Laundry and Dry Cleaners
Broken Bow Ready Mix
Brott, Walter
Brown and Densia
Brown, Floyd
Brown, James L., Sr.
Brown, W. Everett
Brownall, Kenneth J.
Brunkhorst Funeral Home
Buckbee, Clarence
Bullock Chev. Co.
Bureau of Reclamation
Burket, Mrs.
Burns, Joel Hayden
Burtch, Clarence D.
Burton Well Drilling

Bush-Sullivand Dept. Store
Bussell, Delbert
Butler Beef Acres
Byron Chemicals, Inc.

Cameron, K. and Hall, Fern G.
Campbell, Alexander M.
Campus Whirlpool
C and B Trucking
C and K Distributors
Cappies Cafe
Cargill Inc.
Carpenter Funeral Home
Cedar Bowl and Cafe Inc.
Cedar Bowl Inc.
Cedar Lodge Motel
Cement Products Inc.
Central Bar
Central Implement Co.
Central Nebr. Drug
Central Nebr. Pack Company
Chet Clapp Plumbing
Christensen, Donald F.
Christensen, Lloyd
Christensen, Orvel C.
Church of the Assumption
Cinderella Mobil Homes
Cinderella Shop
Circle C. Corp Motel
Circle A Ranchwear
City of Maxwell
City of Ogallala
City of Sargent
City of Seneca
Clairs Boutique
Clark, James S.
Clark's Custom Work
Clappel, Clause Lee
Clouse, Perry
Clyde LeLa Cheur Ranch
Coast to Coast
Cody Market
Cole-Huddleston Insurance Agency
Comer, Max
Conley Netlefsen Truck
Conley Restaurant
Connely, John
Connely, Frank and Edith
Connely, Ronald L.
Conoco Cafe
Consolidated Freightways
Cook Ready Mix
Coop Oil Co.
Cornhusker Tractor
Cornwell, George
Coslur, Donald
County Clerk of Dundy Co.
County of Blaine
County of Custer
County Welfare Office
Coupand, John C.
Cow Country Al Inc.
Cow Country Animal Clinic
Cox, Mrs. Lee
Creative Printers
Crocker Claims Service
Cross, Leonard C.
Culligan Soft Water
Cunningham Law Office
Cushing, George W.
Custer County Extension Service
Custer School Dist. #89
Curtis, John M.

Dahlkoetter, Clarence
Daily Gazette
Dairy Sweet Drive Inn
Daisy Trask Gravel Co.
Data Control Service Co.
Davis, Elbert
DeGroffs Dept. Store
Deterding, E. W.
Detlefson Oil Co.
Dixon Eye Clinic
Dixon Optical Co.
Dobesh Body Shop
Dodge, Larry J.
Dodson, James J.
Dodson, L. A.
Dodson, Merwin
Dons Shoe Service
Donze, John
Doolittle, Hosmer
Double T. Bar
Douglas Texaco
Douglass Drilling
Downey, James R.
Dowse, Curtis
Drauker Funeral Home
Drost, E. B.
Drost, William V.
Duckworth, Arthur W.

Dudden Elevator, Inc.
Dudden, Richard A. and Perry
Dundy County Hospital
Dundy Co. Processors
Dunes Motel Inc.
Dunn, Simon
Duval, Donald

Eastside Cafe
Eastway Motel
Edgar Jewelry, Inc.
Edna's Cafe
Edwards, Hall H.
Eichner, Raymond
Einspahr Drug Store
Eisenach, Robert J.
Electric Hose and Rubber
Elms Motel and Gas Station
El Rancho Motel
Elsie Equity Coop
Elson, George L.
Elson, Thomas W.
Ely, Mrs. Paul
Empfield, Homer G.
Enders Lake Recreation
Engle, Gerald
E R Automotive
Esch, Peter
Eshleman, Earl W.
Estergard, Bob L.
Evans Building Inc.
Evans, Elbridge

Faimon, Stanley
Fairmont Foods
Farmers and Feeders Elev.
Farmers Coop Exch.
Farmers Fertilizer
Farmers Lumber Co.
Farmers Safeway
Farriton Auto Parts
Fasse, Vern
Federal Aviation Admin.
Felzien, Ward L.
Ferguson, Robert
Fischers Hobbies
First National Bank (1)
First National Bank (2)
First National Bank (3)
First National Bank (4)
Fitzer Food Market
Fitzgerald-Stewart
Fleecs, Francis
Flynn Rexall Store
Ford's Jewelry
Fossen, Henry
Franklin, Lauren E.
Frank's Standard Service
Franssen, Herman
Frenchman Valley Irrigation
Friedman Plumbing and Heating
Frieke, Ed
Fries, John
Frontier Airlines
Frontier Motors
Fugate, Buster L.

Gamble Skogmo Inc.
Gamble Store
Garber Shoe Store
Gardner, Kenneth A.
Gateway Motel
Geisert, Harry L.
Genes Drywall
Gengenbach, Dan
Gens
George Schwesors Sons Inc.
Gerken, Henry Lee
Gibsons
Gibson, Warren
Gleason Truck Repair
Gordon West Contractors
Goshor Construction
Gothenburg Feed Products
Gould Jewelers
Grabensteirn Super Service
Graig, W. G.
Grampy's
Grans, Harry
Grantzinger, Floyd
Grassland Veterinary
Grant Seed Mill. Inc.
Great Plains Animal Hospital
Griebel, Leo
Grous, Norris L.
Guernsey, C. Max

Haag, Alfred
Hall, Cameron K. and Fern G.
Ham, Donald D.
Hammond, Richard E.
Hampton Construction Co.

Hanks Radio TV and Appliance
Hansen Fuenning
Hanson and Hanson
Harford, Don E.
Harmon Grain Products
Harold Cook's Upholstry Shop
Harr Insurance Agency
Harris Construction Co.
Harris Serum and Supply
Hartman, Ralph
Harvey, Wm.
Haskell Memorial Methodist Church
Hastings, G. H. and Frederick E. Wanek
Heffelfinger, Robert H.
Hegwood Construction Co.
Heider, Charles F.
Hengen, Ella J. Steele
Hermann, Frank
Herrmann Funeral Homes
Hershey Chevron
Hershfields Dept. Store
Hester Memorial Home
Hesterworth Nursing Home
Hi Line Motor
Hill, W. J.
Hitchcock County News
H. J. Store
Hokes Cafe
Holcomb Drug Store
Holzfasters Inc.
Holiday Inn Motor (1)
Holiday Inn (2)
Home Lumber and Supply Company
Home Telephone Company
Hoof and Horn
Hopkins, Irvin D.
Hopping, William A.
Horky, Joseph J.
Hormel Chev. Company
Horn, Nell B. and Mack B.
Hosde, George D.
Hotel Custer
Hot Lunch Program
House of Electrons
House of Time
Housing Authority of Benkelman
Housing Authority of Imperial
Howard, Kenneth
Howey, Robert
Hoyt, Cloyd
Hudson, Shirley Y.
Huffman, Paul K.
Hughes Farm Inc.
Huskey Oil Co.

I and R W Coop Oil Co.
Ideal Cafe
Ideal Cleaners
Indian Hills Manor
Indianola Oil

Jack and Jill Market
Jack Humphrey Ranch
James Keenan's Beverage
Janus, Kenneth
J. C. Martinex Cartage
J. C. Penney's
J. D. Roofing
J. L. Drug and Vet Co.
J. L. Newberry
Joe's Store
Joe's Supper Club
Johnson, Arthur B.
Johnson, L. G. Insurance Agency
Johnson, Paul A.
Johnson, Opal and Robert
Johnston, Ronald
Jones, G. W.
J's Otter Creek Marina
Judee's Beauty Nook
Justus Feed Mills

K and G Builders
Kates Small Engine
Kautz, Robert L.
KBRL Broadcasting Station
Keith County (1)
Keith County (2)
Keith County Bank and Trust Co.
Keith County Farm Bureau
Keith County News
Keller, Kenneth
Kennedy, Warren
Kersenbrock Drugs
Kier, Jim
Kings Food Host
Kinnenan, Barbara
Kirkman, Leslie
Kleckner, Weldon
Kleeb, Stewart
Kliens Motor and Electric

Klinck, Ronald J.
Klooz, Clark H.
Knoles, Harold
Knott, Allan
Koenings Blacksmith Shop
Kohl Motors
Korell, Glen
Kottmeyer, Fredrick W.
Krajewski, Milford
Kramer, Eugene
Kramer, Lewis
Kramer, Norman and Jack
Krull, Clarence E.
Kuhlman Conoco Service
Kuhlmann, Orvil E.
Kumor, Joe
Kunkel, Max
Kunneman, Arnold
Kurkewski Real Estate

Lafferty, Virgil
Lakeway Lanes, Inc.
Langfeldt, Ray C.
Lantz, Nellie B.
Larington, Loren W.
Larreau, O. W.
Larry's Auto Trim and Glass
Larry's Cafe
Lattier Ranch
Lavender Carousel Beauty Salon
Lavonne's Beauty Salon
Lazy L Ranch Inc.
Lee Cooley Ranch
Lee's Store
Leonard, Frank
Leveling Company
Lincoln Co. Extension Board
Littlefield, Marie J.
Livestock Cafe
Lloyd Miller Ranch
Long, J. Charles
Long, Robert
Loose and Smith
Lords Inc.
Lorens, Francis V.
Lou's Liquor
Lovitt, Lyle

Macke's Standard
Madrid Tavern
Madsen, Herman
Magers, Clarence
Magic Mirror
Magnuson, Oran
Mahnken, Martin G.
Malmkar, Victor
Malone, Thomas
M and E Cafe
M and M Insurance Agency
Manning Frontier Service
Marsh Oil Co.
Martin, Ernest L., Jr.
Martin D. E.
Mattox, W. W.
Maywood Beauty Shop
McArtor, Fern W.
McBride, William E.
McCandless, Eldan
McCartys Drive In
McClure Land and Cattle Co.
McConnell, Charles
McConnell, J. E.
McCook City Schools
McCook Farm Service
McCook Floor Covering
McCook Lumber Co.
McCook Packing Co.
McCroden, James
McDonalds
McDonald State Bank
McGown, Frank
McGrew, Nionia
McKee, Mrs. Ernest
McLaughlin Tree Service
McMurtry, James A.
Mels Equipment Co.
Melvin, F. H.
Mercer
Merricks Ranch House
Meyer, Warren
Middle Loup Sand and Gravel Inc.
Midwest Motel
Miles, Robert
Miller, Leonard C.
Miller Manufacturing Co.
Miller, Ralph
Miller, Valarian D.
Miller Weeder
Mills, Wayne
Minshull, Arthur J.
Mintling, Merle
Mobil Oil

Mode O'Day (1)
Mode O'Day (2)
Modern Cleaners
Montgomery Ward (1)
Montgomery Ward (2)
Montgomery Ward (3)
Moreland, Gene H.
Moreland, George F.
Morosic, Lonnie
Mosier, Larry K.
Mulligan, William
Municipal Utilities
Mustang Motel
Myers, Adrian
Myers, Perry

Nash Finch
Nebraska Central Telephone Co.
Nebraska Machinery
Nebraska Public Power (1)
Nebraska Public Power (2)
Nehlm's IGA
Nelson, Leonard
Nelson Plumbing and Heating
Nelson's Dairy Creme
New Breed Club and Steak House
Nickerson, Elmer
Noll Co.
Norhbueser, Mr.
North Platte Bakery
North Platte Hospital
North Platte Monument Co.
North Platte Packing
North Platte Telegram
North Platte Telegraph
Northwestern Bell (1)
Northwestern Bell (2)
Northwest Public Service
Norvacek, Ed

Oconner, K.
Odegard's Art and Gift
Ogallala Community Hospital
Ogallala Electronics
Ogallala Livestock
Ogallala Medical Clinic
Ogallala Public Schools
Ogallala Union 76 Truck Stop
Ohalloran, Mrs. J. E.
Olson Co.
Olson, Emil
Olson, Irvin
O'neil Mrs. Bernard
Onken Motor Co.
Opela, Charles
Ourada Implement
Ourada, Albert
Owens Implement and Supply

Paradise Motel
Parker, R. A.
Patterson, Charles
Paul's IGA
Pawnee Retirement Hotel
Pawnee Springs Ranch
Pearson, George
Peckham, Rich S., Jr.
Peister Accounting
Penney's (1)
Penney's (2)
Pepsi Cola Bottling
Perkins Co. High School
Perrett, Ocie
Peters Apico
Peters, Britton L.
Peters Dairy Creme
Peters, Floyd C.
Peterson, Lori B.
Peterson, Raymond C.
Peterson's Studio
Pete's Body Shop
Petsch, Rodney L.
Phil's Derby Service
Pinkerton, James
Plains Motor Inc.
Ploand, Glenn W.
Polenske Transfer
Pollman, Walter H., Jr.
Porter, Clarence
Potter, Floyd J.
Power, John
Preston, Everett L.
Prieshers Inc.
Prior's Implement Dealer
Propst, William E.
Province, Paul
Pursley, Melvin A.

Quick Welding Service
Quigley Abstract Co.

Raburn Rexall Drug
Ragland Construction
Raine, Edward
Raining, Alphonse
Ramada Inn (1)
Ramada Inn (2)
R. and C. Petroleum
Randel, Leon M.
R. and N. Grocery
Rarkin-Prochaska Inc.
Rathe, Arlan
Rayburn, Duane E.
R. B. Miller and Sons, Inc.
Redman's Shoes
Regier, Herman L.
Reichert, Robert J.
Reiser, Ted
Reliable Midwest Office Equipment
Richardson, Rex
Riddle, James
Riggs, Alice
Riggs, Darwin P.
Rite-Way Fertilizer Co.
Riteway Inc.
Roberts, William L.
Rockwell, Melvin V.
Rods I-Eighty Service
Roethemeyer, Willis
Rogers Fine Food
Rosentrater, Glen
Roth, Donald
Royal Motel
R. R. Inc. DBA Dog and Suds
Ruby, Thelma
Ruggles, Glenn
Ruser, William
Russell, John

Sadi, Lial M.
Sale Barn Lunch Room
Salsman, Jim R.
Sandman, Charles
Saverwein, Henry
Sawyer Steel Products Company
Schad, Murry G. Agency
Schlager, Richard
Schlueter, Arthur L.
Schmit's Store
School District #1
School District #7
School District #12
School District #14
School District #15
School District #16
School District #17
School District #25
School District #29
School District #31
School District #32
School District #33
School District #36
School District #50
School District #74
School District #84
School District #89
School District #94
School District #104R
School District #109R
School District #164
School District #178
Schreiter, Donald
Schroeder Construction
Scott Oil Co.
Scott, Robert
Scott's Bar
Scrioner, Forrest J.
Scritsmier, Al
Sears
Security State Bank
Seda, Ed
Seery, George
Semeco Broadcasting
Service Insurance
Seybold, Ernest E.
Sexton Ranch
Shakelford, Virgil and Paul
Shag Rub Comb Co.
Shaver Garage
Sherbeck, Albert
Shoe Mart
Shoenaker, Ross C.
Shopp, Bryce D.
Siegfried, Larry
Simon Bros
Simon, James E.
Sines International
Sixth Street Food
Skelly Inn
Smith Cleaners
Smith, Foster S.
Smith, Fred V.

Smith, George Bill
Smith, Ralph
Smyths Deluxe Cafe
Sn-Fro-Fabrics
Snyder, Bruce B.
Souneman, Charlie
Sportsman's Complex
Stanford Lodge Motel
Star Housemoving Co.
Starr Ranch
State Dept. of Roads
States, J. L.
St. Catherine's Hospital
Steel, Harry J.
Steggs Flying Service
Steinwart, Edward
Steinwart, Frank
Stephen's Reality Co.
Stevens and Sinor
Stevens Seven-Up
Stewart, R. R.
St. Mary's Church
Stone, Mrs. William
Stout, Kenneth
St. Patrick's School
St. Patrick's Elementary School
Stratton Public School
Stumpff, Mr.
Sturdevant, C. E.
Styl-Lette Salon
Sughroue, Elmo
Sughroue, Robert
Sullivan C. M. Agency
Susie Beauty Shop
Sutherland Style Shop
Swanson Buick Pontiac
Swanson Sign Co.
Sweet, Leland

Tatum's Processing Plant
Taylor, Carrell
Taylor, Sylvia
Ted's Jack and Jill
Telephone Office
Tepley, Wilbur
Thalken, Darrel J.
The Bittersweet
The David Store
The Hairdresser
The Nebraskan (1)
The Nebraskan (2)
Themlas Beauty Shop
Teneyck, James
Timmerman, J. D.
Thomas Agency Inc.
Thomas County
Thomas, Cyrus
Thompson, Chester L.
Tiff, Jay
Tilford, William
Tiller, George
Timm-Reynolds-Love Funeral Home
Tim's Meats
Toby, Dale
Tomahawk Oil Company
Tom Padgett Construction
Top Notch Automative
Towne, Melvin M.
Trauther, Bernadine
Travis, Everett
Trinity Lutheran Cemetary
Tri-State Livestock
Truck Line Inc.
Trupp, Raymond
T. R. W. Capacitors (1)
T. R. W. Capacitors (2)

Uehling, Kathleen G.
Union Pacific Railroad
United States Post Office (1)
United States Post Office (2)
United States Post Office (3)
United States Post Office (4)
United States Post Office (5)
United States Post Office (6)
United States Post Office (7)
United States Post Office (8)
Universal Insurance
Uotaw, Eli B., Jr.

Vachuta, Joseph
Valley Farm Supply
Valley Hi Ceramics
Valley Motel
Valley View of North Platte
Valley Vet Clinic
Vanboening, Gene
Vanevery Saunders Agency
Van's Ranch Service
Varney Rexall Drugs
Village of Ansley
Village of Culbertson

Village of Trenton
Voda, Edward
Vonnie's Cafe

Wacker-Elliott-Wacker
Waddell, Charles W.
Walkers Service
Wallace and Kelley Attorneys
Wallace Construction
Walter Chamberlain Ranch
Walter, Russell H.
Wanek, Frederick E.
Warner, George C.
Wathers Midwest Office Equipment Company
Watkins, Clarence G.
Watkins, Mike
Wauer, Ervin
Wauneta Co-op Oil Company
Wauneta Falls Bank
Wauneta Public Schools
Wayne Dowhower Construction
Weigel, O. A.
Weinman, Paul
Wenquist Inc.
Weskamp, Otto
Westerbuhr, Elmer C.
West Park Grocery
Whaley, S. B.
Whitaker Furniture Co.
Whitehead, J. C.
White, P. R. and Vera
Whitetail Creek Ranch Co.
Wienbarg, Gus
Wilcox, Bob
Wilcox, Minnie L.
Wilson, Elmer
Wilson, John
Williams Husky Truck Stop and Restaurant
Wolfe, Emil V.
Wolford Construction
Wooden Shoe Motel
Woods Imp. Co.
W. T. Grant Company

Yamaki, George H.
Yates, Raymond
Y.M.C.A.
Yoat's Appliance
Younghans, Robert

APPENDIX G

ACTUAL COUNTS FOR OCCUPATIONAL CATEGORIES AND OCCUPATIONAL GROUPS

SUMMARY BY OCCUPATIONAL CATEGORIES

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample				
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O	
	Professional, Technical, and Managerial Occupations	2125	223	99	124	251	298	25	11	14	4	592	66	26	40	173	1235	132	62	70	134
	Clerical and Sales Occupations	2068	280	100	180	312	333	35	16	19	18	428	63	48	15	104	1307	182	36	146	190
	Service Occupations	1804	550	75	475	857	324	46	7	39	33	318	102	14	88	78	1162	402	54	348	746
	Farming, Fishery, Forestry and Related Occupations	646	119	49	70	100	241	41	19	22	27	118	15	4	11	14	287	63	26	37	59
	Processing Occupations	180	34	8	26	17	7	0	0	0	0	104	29	8	21	17	69	5	0	5	0
	Machine Trades Occupations	258	64	20	44	92	37	5	5	0	1	86	39	5	34	67	135	20	10	10	24
	Bench Work Occupations	932	82	37	45	128	57	12	8	4	12	603	66	25	41	116	272	4	4	0	0
	Structural Work Occupations	682	123	59	64	195	104	21	10	11	18	79	17	11	6	31	499	85	38	47	146
	Miscellaneous Occupations	1114	143	22	121	137	170	16	5	11	4	146	29	9	20	43	798	98	8	90	90
	Occupations with No D.O.T. Number	65	6	0	6	14	4	0	0	0	0	21	0	0	6	14	40	0	0	0	0
	TOTAL	9874	1624	469	1155	2103	1575	201	81	120	117	2495	432	150	282	597	5804	991	238	753	1389

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years		
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Architecture and Engineering																							
001.081	Architect	9	1	1	0	2						4	1	1	0	2	5	0	0	0	0		
001.281-010	Draftsman, Architectural	15	0	0	0	0											15	0	0	0	0	17.13	1
003.081	Electrical Engineer	1	0	0	0	0											1	0	0	0	0		
003.081	Electronic Engineer	4	0	0	0	0	2	0	0	0	0						2	0	0	0	0		
003.087	Electrical Power Engineer	1	0	0	0	0											1	0	0	0	0		
003.181-014	Electronic Technician	9	2	1	1	3	1	1	1	0	1						8	1	0	1	2	16.0108	2
003.281-010	Draftsman, Electrical	2	0	0	0	0											2	0	0	0	0	17.13	1
003.281-014	Draftsman, Electronic	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0	17.13	1
003.281-026	Instrumentation Technician	4	0	0	0	2											4	0	0	0	2	16.0112	3
005.081	Civil Engineer	17	2	2	0	5						17	2	2	0	5							
005.081	Hydraulic Engineer	2	0	0	0	0											2	0	0	0	0		
005.281-014	Draftsman, Civil	29	10	10	0	30						29	10	10	0	30						17.13	1
005.281-018	Draftsman, Structural	2	0	0	0	0											2	0	0	0	0	17.13	1
007.081	Refrigeration Engineer	1	0	0	0	0											1	0	0	0	0		
012.081	Safety Engineer	2	0	0	0	0						1	0	0	0	0	1	0	0	0	0		
018.188	Surveyor	14	0	0	0	0						12	0	0	0	0	2	0	0	0	0		
018.587	Surveyor Helper	2	2	0	2	0											2	2	0	2	0		
019.281-018	Quality Control Technician	12	2	0	2	2						7	2	0	2	2	5	0	0	0	0	16.0113	4
	Total	128	19	14	5	44	4	1	1	0	1	70	15	13	2	39	54	3	0	3	4		
Mathematics and Physical Science																							
020.188-026	Programmer, Business	1	1	1	0	1											1	1	1	0	1	14.0203	5
	Total	1	1	1	0	1											1	1	1	0	1		

* Program
1 - Drafting
2 - Electronic Technology
3 - Instrumentation Technology
4 - Mechanical Technology
5 - Programmers

** Whenever a blank appears in this column, there were no identifiable instructional programs.

PROFESSIONAL, TECHNICAL, AND MANAGERIAL OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Life Science																							
040.081	Microbiologist	5	0	0	0	0						5	0	0	0	0							
040.081	Agronomist	1	0	0	0	0						1	0	0	0	0							
045.108	Counselor II	4	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0	0	0	0		
	Total	10	0	0	0	0	1	0	0	0	0	7	0	0	0	0	2	0	0	0	0		
Medicine and Health																							
070.081	Pathologist	0	1	1	0	0											0	1	1	0	0		
070.108	General Practitioner	11	0	0	0	3	4	0	0	0	0	1	0	0	0	0	6	0	0	0	3		
070.108	Anesthesiologist	2	0	0	0	0											2	0	0	0	0		
070.108	Radiologist	1	0	0	0	0											1	0	0	0	0		
071.108	Osteopathic Physician	1	0	0	0	0	1	0	0	0	0												
072.108	Dentist	6	0	0	0	0	3	0	0	0	0	1	0	0	0	0	2	0	0	0	0		
073.108	Veterinarian	13	1	1	0	3	2	0	0	0	0						11	1	1	0	3		
073.381-010	Laboratory Technician, Veterinary	2	1	1	0	1											2	1	1	0	1	01.0299	6
074.181	Pharmacist	40	0	0	0	0	6	0	0	0	0	1	0	0	0	0	33	0	0	0	0		
074.387	Pharmacy Helper	1	0	0	0	0											1	0	0	0	0		
075.118	Director, Nursing Service	2	1	0	1	0											2	1	0	1	0		
075.128	Nurse, Head	1	0	0	0	0											1	0	0	0	0		
075.128	Nurse, School	1	0	0	0	1						1	0	0	0	1							
075.378-010	Nurse, Anesthetist	2	0	0	0	1											2	0	0	0	1	07.0301	7
075.378-014	Nurse, General Duty	78	31	23	8	27	10	1	1	0	0	29	7	1	6	2	39	23	21	2	25	07.0301	7
077.128	Nutritionist	1	0	0	0	0											1	0	0	0	0		
077.168	Dietician	2	0	0	0	0											2	0	0	0	0		
078.281-018	Medical Technologist	5	5	4	1	0											5	5	4	1	0	07.0203	8
078.368-030	Radiologic Technologist	11	2	1	1	1	4	1	1	0	0	3	1	0	1	0	4	0	0	0	1	07.0501	9
078.381-010	Medical Laboratory Assistant	12	1	0	1	2						3	1	0	1	0	9	0	0	0	2	07.0203	8

* Program
6 - Ag. Supplies/Services, Other
7 - Nursing
8 - Medical Laboratory Assisting
9 - Radiologic Technology (X-Ray)

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No**	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
079.108	Chiropractor	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0		
079.108	Optometrist	3	0	0	0	0	2	0	0	0	0						1	0	0	0	0		
079.108	Speech Clinician	1	1	1	0	0						1	1	1	0	0							
079.368-018	Inhalation Therapist	5	1	0	1	2											5	1	0	1	2	07.0903	10
079.368-022	Medical Assistant	5	1	0	1	0	4	1	0	1	0						1	0	0	0	0	07.0904	11
079.378	Physical Therapist	5	1	1	0	0											5	1	1	0	0		
079.378-010	Dental Assistant	11	0	0	0	0	3	0	0	0	0	2	0	0	0	0	6	0	0	0	0	07.0101	12
079.378-026	Nurse, Licensed Practical	56	27	18	9	27	4	2	2	0	0	12	6	1	5	4	40	19	15	4	23	07.0302	13
079.378-042	Surgical Technician	17	1	0	1	1						3	1	0	1	0	14	0	0	0	1	07.0305	14
	Total	297	75	51	24	69	44	5	4	1	0	57	17	3	14	7	196	53	44	9	62		
Education																							
091.118	Superintendent, Schools	58	2	0	2	1	10	1	0	1	0	17	0	0	0	0	31	1	0	1	1		
091.228	Teacher, Secondary School	414	35	3	32	35	52	6	0	6	0	125	8	2	6	10	237	21	1	20	25		
092.228	Teacher, Elementary School	405	36	4	32	43	54	2	2	0	2	113	13	2	11	21	238	21	0	21	20		
094.228	Teacher, Mentally Retarded	0	1	1	0	0	0	1	1	0	0												
096.128	County Home Demonstrator Agent	1	1	1	0	0											1	1	1	0	0		
096.128-014	County Agricultural Agent	2	1	1	0	0											2	1	1	0	0	01.02	6
099.168	Audiovisual Specialist	1	0	0	0	0											1	0	0	0	0		
099.168	Educational Specialist	2	0	0	0	0											2	0	0	0	0		
	Total	883	76	10	66	79	116	10	3	7	2	255	21	4	17	31	512	45	3	42	46		
Museum, Library and Archival Science																							
100.168	Librarian	5	0	0	0	0	1	0	0	0	0						4	0	0	0	0		
100.388	Medical Record Librarian	6	1	0	1	0						5	1	0	1	0	1	0	0	0	0		
	Total	11	1	0	1	0	1	0	0	0	0	5	1	0	1	0	5	0	0	0	0		

* Program
6 - Ag. Supplies/Services, Other
10 - Inhalation Therapy
11 - Medical Assistant (Physician's Office)
12 - Dental Assisting
13 - Practical (Vocational) Nursing
14 - Surgical Technician (Operating Room Technician)

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No**	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Law and Jurisprudence																							
110.108	Lawyer	20	3	3	0	0	7	1	1	0	0	6	2	2	0	0	7	0	0	0	0		
111.108	Judge	2	2	0	2	0	1	1	0	1	0						1	1	0	1	0		
119.288	Abstractor	1	0	0	0	0	1	0	0	0	0												
119.288	Law Clerk	2	1	0	1	0											2	1	0	1	0		
	Total	25	6	3	3	0	9	2	1	1	0	6	2	2	0	0	10	2	0	2	0		
Religion and Theology																							
120.108	Clergy	5	2	2	0	0	1	0	0	0	0						4	2	2	0	0		
		5	2	2	0	0	1	0	0	0	0						4	2	2	0	0		
Writing																							
131.068	News Analyst, Broadcast	1	0	0	0	1						1	0	0	0	1							
132.018	Editor, Newspaper	10	0	0	0	0	9	0	0	0	0						1	0	0	0	0		
132.038	Editor, Department	7	0	0	0	0											7	0	0	0	0		
132.268	Reporter	15	0	0	0	0	3	0	0	0	0						12	0	0	0	0		
139.288	Writer, Technical Publications	1	0	0	0	0						1	0	0	0	0							
	Total	34	0	0	0	1	12	0	0	0	0	2	0	0	0	1	20	0	0	0	0		
Art																							
143.062-022	Manager, Photographic Gallery or Studio	1	0	0	0	0						1	0	0	0	0						04.15	15
		1	0	0	0	0						1	0	0	0	0							

* Program
15 - Personal Services

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Entertainment and Recreation																							
152.028	Teacher, Music	6	0	0	0	0											6	0	0	0	0		
152.048	Musician	3	0	0	0	0											3	0	0	0	0		
153.118	Director, Athletic	1	0	0	0	0											1	0	0	0	0		
153.228	Instructor, Swimming	1	0	0	0	0	1	0	0	0	0												
153.228	Instructor, Physical Education	7	0	0	0	0											7	0	0	0	0		
159.148	Announcer	5	2	1	1	2						5	2	1	1	2							
	Total	23	2	1	1	2	1	0	0	0	0	5	2	1	1	2	17	0	0	0	0		
Administrative Specialization																							
160.168	Auditor, City or County	2	0	0	0	0	2	0	0	0	0												
160.188	Accountant	31	0	0	0	2	6	0	0	0	0	6	0	0	0	2	19	0	0	0	0		
160.288-018	Estimator	6	0	0	0	0											6	0	0	0	0	14.0101	16
161.118-018	Treasurer	10	4	0	4	0	6	2	0	2	0						4	2	0	2	0	14.0802	17
162.158-030	Buyer, Assistant	3	0	0	0	0											3	0	0	0	0	04.08	18
162.158-050	Buyer II	6	0	0	0	0	1	0	0	0	0	4	0	0	0	0	1	0	0	0	0	04.08	18
162.158-054	Buyer, Livestock	2	0	0	0	1											2	0	0	0	1	01.0401	19
162.158-102	Purchasing Agent	3	0	0	0	0											3	0	0	0	0	04.99	20
162.168-010	Buyer, Grain	1	0	0	0	0	1	0	0	0	0											01.0401	19
163.118-026	Manager, Sales	14	0	0	0	2	4	0	0	0	1	4	0	0	0	1	6	0	0	0	0	04.12	21
163.168-018	Manager, Utility Sales and Services	1	0	0	0	0											1	0	0	0	0	04.12	21
164.118-014	Manager, Advertising	0	1	1	0	0											0	1	1	0	0	04.01	22
166.118-022	Manager, Personnel	3	1	0	1	0						2	1	0	1	0	1	0	0	0	0	14.0603	23
168 168-010	Building Inspector	1	0	0	0	1											1	0	0	0	1	17.2899	24
168 168-050	Manager, Credit and Collection	5	1	0	1	0						2	0	0	0	0	3	1	0	1	0	14.0899	25
169.168-026	Chief Clerk	8	0	0	0	2						1	0	0	0	1	7	0	0	0	1	14.0805	26
169.168-062	Manager, Office	37	2	1	1	0	5	0	0	0	0	9	1	1	0	0	23	1	0	1	0	14.0805	26
	Total	133	9	2	7	8	25	2	0	2	1	28	2	1	1	4	80	5	1	4	3		

* Program

16 - Accountant
17 - Budget Management Analyst
18 - General Merchandise
19 - Food Products
20 - Distributive Education, Other
21 - Industrial Marketing
22 - Advertising Services
23 - Personnel Assistants
24 - Public Service Occupations, Other
25 - Supervisory and Administrative Management Occupations, Other
26 - Office Managers and Chief Clerks

** Whenever a blank appears in this column, there were no identifiabl. instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No**	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Managers, Officials (other)																							
180.168-014	Artificial Breeding Distributor	1	1	1	0	0											1	1	1	0	0	01.02	6
180.168-022	General Manager, Farm	1	0	0	0	0											1	0	0	0	0	01.0104	27
181.118-010	Manager, Bulk Plant	2	0	0	0	0	2	0	0	0	0											04.16	28
182.168	Contractor	10	0	0	0	0						1	0	0	0	0	9	0	0	0	0		
182.168	Superintendent, Construction	20	0	0	0	0	1	0	0	0	0						19	0	0	0	0		
182.287	Construction Inspector	6	0	0	0	0						6	0	0	0	0							
183.118	Production Superintendent	24	0	0	0	0	3	0	0	0	0	11	0	0	0	0	10	0	0	0	0		
183.168	Supervisor, General	65	2	0	2	6						41	2	0	2	4	24	0	0	0	2		
184.118	Manager, Station	3	0	0	0	0						3	0	0	0	0							
184.118-018	Director, Transportation	1	0	0	0	0						1	0	0	0	0						04.19	29
184.168	Director, Program	1	0	0	0	0						1	0	0	0	0							
184.168-090	Manager, Traffic	2	0	0	0	0											2	0	0	0	0	04.19	29
184.168-138	Station Master	3	0	0	0	0											3	0	0	0	0		
184.168	Superintendent, Electric Power	4	2	0	2	1											4	2	0	2	1		
184.168	Water and Sewer System Supervisor	1	0	0	0	0											1	0	0	0	0		
184.168	Yard Master	28	0	0	0	0											28	0	0	0	0		
185.168-030	Manager, Distribution Warehouse	6	0	0	0	1	1	0	0	0	0	2	0	0	0	1	3	0	0	0	0	04.31	30
185.168-046	Manager, Merchandise	1	0	0	0	0											1	0	0	0	0	04.08	18
185.168-050	Manager, Parts	6	0	0	0	0	1	0	0	0	0	3	0	0	0	0	2	0	0	0	0	04.03	31
185.168-054	Manager, Store I	131	6	4	2	12	38	0	0	0	0	27	0	0	0	5	66	6	4	2	7	04.08	18
185.168-066	Service Manager	11	0	0	0	2	1	0	0	0	0	2	0	0	0	2	8	0	0	0	0	04.03	31
185.168-078	Wholesaler	2	0	0	0	0											2	0	0	0	0	04.31	30
186.118-026	Manager, Financial Institution	12	0	0	0	3	3	0	0	0	0	4	0	0	0	3	5	0	0	0	0	04.04	32
186.118-030	Manager, Insurance	3	1	1	0	0	1	0	0	0	0						2	1	1	0	0	04.13	33
186.118	Controller	1	0	0	0	0											1	0	0	0	0		
186.168-010	Bank Cashier	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0						04.04	32
186.168-022	Manager, Apartment House	2	0	0	0	0											2	0	0	0	0	04.17	34

* Program

6 - Agricultural Supplies/Services
18 - General Merchandise
27 - Farm Business Management
28 - Petroleum
29 - Transportation
30 - Wholesale Trade, Other
31 - Automotive
32 - Finance and Credit
33 - Insurance
34 - Real Estate

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No**	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
186.168-030	Manager, Insurance Office	2	0	0	0	0	2	0	0	0	0											04.13	33
186.288-010	Loan Officer	23	1	1	0	6	1	0	0	0	0	8	0	0	0	6	14	1	1	0	0	04.04	32
187.118	Director, Community Organization	1	1	1	0	0	1	1	1	0	0												
187.118-030	Manager, Hotel	2	0	0	0	0	2	0	0	0	0											04.11	35
187.118-034	Manager, Motel	8	0	0	0	0											8	0	0	0	0	04.11	35
187.118	Administrator, Hospital or Nursing Home	21	2		2	0	1	0	0	0	0	15	2	0	2	0	5	0	0	0	0		
187.168	Manager, Recreation	1	0		0	0											1	0	0	0	0		
187.168-026	Director, Funeral	8	0		0	2						4	0	0	0	2	4	0	0	0	0	04.15	15
187.168-038	Director, School Lunch Program	1	0	0	0	0											1	0	0	0	0	09.0203	36
187.168-050	Executive Housekeeper	5	0	0	0	0											5	0	0	0	0	09.0205	37
187.168-062	Manager, Beauty Shop	8	0	0	0	0	2	0	0	0	0						6	0	0	0	0	04.15	15
187.168-106	Manager, Liquor Establishment	11	1	1	0	0	1	1	1	0	0	3	0	0	0	0	7	0	0	0	0	04.07	38
187.168-126	Manager, Restaurant or Coffee Shop	35	5	2	3	3	10	1	0	1	0	5	0	0	0	0	20	4	2	2	3	04.07	38
187.168-162	Manager, Catering	1	0	0	0	0											1	0	0	0	0	04.07	38
187.168-194	Superintendent, Building II	1	0	0	0	0	1	0	0	0	0											04.17	34
187.168-198	Superintendent, Laundry	1	0	0	0	0											1	0	0	0	0	04.15	15
188.118	Manager, City; Industrial Planning Administrator	6	0	0	0	0	4	0	0	0	0						2	0	0	0	0		
188.118	Welfare Director	1	0	0	0	0											1	0	0	0	0		
188.168	Postmaster	7	0	0	0	0						1	0	0	0	0	6	0	0	0	0		
188.168	Manager, Housing Authority	1	0	0	0	0	1	0	0	0	0												
188.168	Elections Procedures Advisor	2	2	0	2	0	1	1	0	1	0						1	1	0	1	0		
188.188	Assessor	5	3	0	3	0	3	1	0	1	0						2	2	0	2	0		
189.118-018	Manager, Industrial Organization	45	2	2	0	4	1	0	0	0	0	14	2	2	0	4	30	0	0	0	0	04.12	21
189.118	President, Vice President	1	0	0	0	0	1	0	0	0	0												
189.168-018	Manager, Trainee	6	2	1	1	3						2	0	0	0	2	4	2	1	1	1	04.08	18
	Total	552	31	14	17	43	84	5	2	3	0	155	6	2	4	29	313	20	10	10	14		

* Program

15 - Personal Services
18 - General Merchandise
21 - Industrial Marketing
32 - Finance and Credit
33 - Insurance
34 - Real Estate
35 - Hotel and Lodging
36 - Food Management, Production and Services
37 - Institutional and Home Management and Supporting Services
38 - Food Services

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years		
Miscellaneous	Professional, Technical and Managerial																						
191.288	Appraiser	0	0	0	0	1											0	0	0	0	1		
195.108	Caseworker	17	1	1	0	1											17	1	1	0	1		
195.228	Program Aid, Group Work; Recreation Leader	2	0	0	0	0											2	0	0	0	0		
196.283-014	Airplane Pilot, Commercial	3	0	0	0	2						1	0	0	0	0	2	0	0	0	2	16.0601	39
	Total	22	1	1	0	4						1	0	0	0	0	21	1	1	0	4		
	TOTAL PROFESSIONAL, TECHNICAL AND MANAGERIAL	2125	223	99	124	251	298	25	11	14	4	592	66	26	40	113	1235	132	62	70	134		

* Program

39 - Commercial Pilot Training

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	New No**	Program *
Stenographic, Typing, Filing and Related																							
201.368-010	Legal Secretary	13	5	4	1	1	6	1	1	0	0	2	2	2	0	0	5	2	1	1	1	14.0702	1
201.368-014	Medical Secretary	1	1	0	1	0											1	1	0	1	0	14.0702	1
201.368-018	Secretary	142	12	4	8	31	33	3	1	2	3	46	4	2	2	18	63	5	1	4	10	14.0702	1
202.388-014	Stenographer	29	3	0	3	2											29	3	0	3	2	14.0703	2
203.588-014	Telegraphic Typewriter Operator	34	2	0	2	0	11	0	0	0	0	2	0	0	0	0	21	2	0	2	0	14.0902	3
205.368-026	Personnel Clerk	1	1	0	1	0						1	1	0	1	0						14.0603	4
206.388-018	File Clerk I	8	0	0	0	0											8	0	0	0	0	14.0302	5
209.388-018	Classified Ad Clerk	7	1	0	1	0	2	1	0	1	0						5	0	0	0	0	14.0399	6
209.388-022	Clerk Typist	2	0	0	0	0											2	0	0	0	0	14.0901	7
209.488-010	Circulation Clerk	10	0	0	0	0	8	0	0	0	0						2	0	0	0	0	14.0399	6
209.588-018	Clerk, General	43	4	1	3	6	6	0	0	0	0	7	0	0	0	0	30	4	1	3	6	14.0399	6
209.588-030	Credit Card Clerk	1	0	0	0	0											1	0	0	0	0	14.0399	6
209.588-046	Marker	1	0	0	0	0											1	0	0	0	0	04.08	8
209.688-014	Checker II	9	0	0	0	0											9	0	0	0	0	14.0399	6
209.688-034	Proofreader I	1	0	0	0	0											1	0	0	0	0	14.0399	6
	Total	302	29	9	20	40	66	5	2	3	3	58	7	4	3	18	178	17	3	14	19		
Computing and	Account Recording																						
210.388-014	Audit Clerk	2	0	0	0	0											2	0	0	0	0	14.0102	9
210.388-018	Billing Control Clerk	1	0	0	0	2											1	0	0	0	2	14.0102	9
210.388-022	Bookkeeper I	206	13	5	8	24	43	1	1	0	0	31	4	3	1	9	132	8	1	7	15	14.0102	9
210.388-058	Night Auditor	1	1	0	1	2											1	1	0	1	2	14.0102	9
211.368-010	Cashier I	34	9	1	8	10	2	0	0	0	0	6	2	1	1	2	26	7	0	7	8	14.0103	10
211.468-010	Cashier II	34	7	4	3	7	4	1	0	1	2	3	2	0	2	2	27	4	4	0	3	04.08	8
211.468-034	Desk Clerk	43	9	6	3	3											43	9	6	3	3	04.11	11
212.138-010	Teller, Head	4	1	1	0	0	2	1	1	0	0						2	0	0	0	0	14.0105	12
212.368-010	Teller	42	11	4	7	13	2	1	1	0	0	11	1	1	0	9	29	9	2	7	4	14.0105	12

* Program

1 - Secretaries
2 - Stenographers
3 - Typists
4 - Personnel Assistants
5 - File Clerks
6 - Filing, Office Machines, and Gen. Office Clerical Occu., Other
7 - Clerk-Typists
8 - General Merchandise
9 - Bookkeeper
10 - Cashiers
11 - Hotel and Lodging
12 - Tellers

** Whenever a blank appears in this column, there were no identifiable instructional programs.

CLERICAL AND SALES OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	New No**	Program *
212.368-018	Teller, Note	1	0	0	0	0											1	0	0	0	0	14.0105	12
213.138-010	Supervisor, Computer Operations	1	0	0	0	0											1	0	0	0	0	14.0201	13
213.382-018	Digital Computer Operator	3	1	1	0	0						1	0	0	0	0	2	1	1	0	0	14.0201	13
213.582-010	Key Punch Operator	13	5	4	1	6											13	5	4	1	6	14.0202	14
214.488-010	Billing Machine Operator	2	0	0	0	0											2	0	0	0	0	14.0104	15
216.488-022	Food Checker I	3	0	0	0	0											3	0	0	0	0	04.07	16
217.388-010	Proof Machine Operator	3	0	0	0	2						2	0	0	0	2	1	0	0	0	0	14.0104	15
219.388-026	Billing Clerk II	1	0	0	0	0											1	0	0	0	0	14.0303	17
219.388-066	Clerk, General Office	103	14	1	13	21	9	2	0	2	0	21	0	0	0	3	73	12	1	11	18	14.0303	17
219.388-146	Insurance Clerk I	10	0	0	0	0	1	0	0	0	0						9	0	0	0	0	14.0303	17
219.488-010	Accounting Clerk	18	5	0	5	2	2	2	0	2	0						16	3	0	3	2	14.0303	17
	Total	525	76	27	49	92	65	8	3	5	2	75	9	5	4	27	385	59	19	40	63		
Shipping and Receiving Clerks																							
221.388-054	Production Clerk II	2	0	0	0	0											2	0	0	0	0	14.0501	18
222.138-026	Shipping Clerk	1	0	0	0	0						1	0	0	0	0						14.0503	19
222.387-018	Receiving Clerk	3	0	0	0	0											3	0	0	0	0	14.0503	19
222.387-026	Shipping and Receiving Clerk	1	0	0	0	0											1	0	0	0	0	14.0503	19
223.138-026	Stock Supervisor	1	1	1	0	0	1	1	1	0	0											14.0504	20
223.138-038	Supervisor, Stock	1	0	0	0	0											1	0	0	0	0	14.0504	20
223.387	Stock Clerk	37	12	1	11	9	2	0	0	0	0	2	1	0	1	3	33	11	1	10	6		
223.388-014	Inventory Clerk	3	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	14.0504	20
223.388-018	Inventory Clerk, Stockroom	1	0	0	0	0											1	0	0	0	0	14.0504	20
223.887-010	Central Supply Worker	6	1	0	1	1						5	1	0	1	0	1	0	0	0	1	07.0905	21
224.587	Weighmaster	1	0	0	0	0						1	0	0	0	0							
	Total	57	14	2	12	10	4	1	1	0	0	10	2	0	2	3	43	11	1	10	7		

* Program

12 - Tellers
13 - Computers and Console Operators
14 - Key Punch and Coding Equipment Operators
15 - Machine Operators
16 - Food Services
17 - General Office Clerks
18 - Planning and Production Clerks
19 - Shipping and Receiving Clerks
20 - Stock and Inventory Clerks
21 - Central Supply Technicians

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No**	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Information and Message Distribution																							
230.878-022	Messenger	6	2	0	2	6	6	2	0	2	6											14.0405	22
231.588-014	Mail Clerk	7	0	0	0	0						2	0	0	0	0	5	0	0	0	0	14.0403	23
232.368-010	Post Office Clerk (Clerical)	3	0	0	0	0											3	0	0	0	0	14.0403	23
232.368-014	Post Office Clerk (Gov. Serv.)	4	0	0	0	0											4	0	0	0	0	14.0403	23
233.388-010	Mail Carrier	6	0	0	0	0											6	0	0	0	0	14.0403	23
233.388-014	Rural Mail Carrier	6	0	0	0	0						1	0	0	0	0	5	0	0	0	0	14.0403	23
235.862-026	Telephone Operator	72	12	0	12	24											72	12	0	12	24	14.0401	24
237.368-038	Receptionist	41	3	1	2	3	12	0	0	0	0	9	2	1	1	1	20	1	0	1	2	14.0406	25
237.368-042	Registrar	3	0	0	0	0	3	0	0	0	0											14.0406	25
	Total	148	17	1	16	33	21	2	0	2	6	12	2	1	1	1	115	13	0	13	26		
Miscellaneous Clerical																							
240.388-010	Collection Clerk	3	0	0	0	0											3	0	0	0	0	14.9900	26
240.468-010	Lay-Away Clerk	4	0	0	0	1						1	0	0	0	1	3	0	0	0	0	14.9900	26
241.168-010	Claim Adjuster	1	0	0	0	0											1	0	0	0	0	04.1300	27
249.3[illegible]-014	Clerk, Electoral	1	0	0	0	0	1	0	0	0	0											14.9900	26
249.368-026	Court Clerk	8	8	0	8	0	4	4	0	4	0						4	4	0	4	0	14.9900	26
249.368-050	Library Assistant	3	0	0	0	0											3	0	0	0	0	14.0499	28
249.368-062	New Account Clerk	32	5	0	5	0											32	5	0	5	0	04.08	8
249.368-066	New Account Teller	4	0	0	0	0											4	0	0	0	0	04.04	29
249.368-070	Order Clerk	15	0	0	0	1	3	0	0	0	0	1	0	0	0	1	11	0	0	0	0	14.9900	26
249.388-034	Medical Record Clerk	4	1	1	0	1											4	1	1	0	1	14.0499	28
	Total	75	14	1	13	3	8	4	0	4	0	2	0	0	0	2	65	10	1	9	1		
Sales Workers, Services																							
250.258-014	Sales Worker, Insurance	16	1	1	0	1	9	0	0	0	0	1	0	0	0	0	6	1	1	0	1	04.13	27
250.358-026	Sales Worker, Real Estate	8	0	0	0	0	2	0	0	0	0						6	0	0	0	0	04.17	30

* Program

8 - General Merchandise
22 - Messengers and Office Boys and Girls
23 - Mail and Postal Clerks
24 - Communication Systems Clerks and Operators
25 - Receptionist and Information Clerks
26 - Office Occupations, Other
27 - Insurance
28 - Information Communication Occupations, Other
29 - Finance and Credit
30 - Real Estate

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years		
252.358-014	Sales Worker, Business Services	1	0	0	0	0											1	0	0	0	0	04.12	31
253.358-010	Sales Worker, Radio and Television Time	4	1	1	0	1						4	1	1	0	1						04.01	32
257.358-010	Sales Worker, Public Utilities	1	0	0	0	0											1	0	0	0	0	04.99	33
258.358-010	Sales Worker, Advertising	4	1	0	1	0	4	1	0	1	0											04.01	32
258.358-018	Sales Worker, Signs	3	0	0	0	0											3	0	0	0	0	04.01	32
	Total	37	3	2	1	2	15	1	0	1	0	5	1	1	0	1	17	1	1	0	1		
Sales Workers and Salespersons, Commodities																							
262.358-010	Sales Worker, Food Products	1	0	0	0	0											1	0	0	0	0	04.06	34
262.358-014	Sales Worker, Grain and Feed Products	5	0	0	0	0						1	0	0	0	0	4	0	0	0	0	01.0202	35
263.358-050	Salesperson, Shoes	18	2	0	2	6	3	0	0	0	3	3	2	0	2	0	12	0	0	0	3	04.02	36
263.458-010	Salesperson, Infants' and Children's Wear	11	2	0	2	0											11	2	0	2	0	04.02	36
263.458-014	Salesperson, Men's and Boys' Clothing	25	3	1	2	0	4	1	1	0	0						21	2	0	2	0	04.02	36
263.458-022	Salesperson, Women's Garments	35	5	2	3	2	5	0	0	0	0						30	5	2	3	2	04.02	36
263.458-026	Salesperson, Yard Goods	6	0	0	0	0											6	0	0	0	0	04.08	8
266.358-014	Salesperson, Cosmetics and Toiletries	1	0	0	0	0						1	0	0	0	0						04.08	8
270.258-010	Sales Worker, Rubber Goods	1	0	0	0	1						1	0	0	0	1						04.12	37
274.358-014	Sales Worker, Custom Drapery	1	0	0	0	1						1	0	0	0	1						04.10	38
274.358-018	Sales Worker, Floor Coverings	2	0	0	0	1						2	0	0	0	1						04.10	38
274.358-034	Salesperson, Furniture	9	0	0	0	0	4	0	0	0	0	5	0	0	0	0						04.10	38
276.158-010	Sales Worker, Machinery	9	0	0	0	0	1	0	0	0	0	2	0	0	0	0	6	0	0	0	0	04.12	37
276.358-010	Sales Worker, Building and Construction Equip. and Supp.	4	0	0	0	0	2	0	0	0	0						2	0	0	0	0	04.09	39
276.358-058	Salesperson, General Hardware	13	3	3	0	0	8	3	3	0	0						5	0	0	0	0	04.09	39

* Program

8 - General Merchandise
31 - Industrial Marketing
32 - Advertising Services
33 - Distributive Education, Other
34 - Food Distribution
35 - Feeds
36 - Apparel and Accessories
37 - Industrial Marketing
38 - Home Furnishings
39 - Hdwe., Bldg. Materials, Farm and Garden Supplies and Eqp.

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years		
277.358-018	Sales Worker, Farm and Garden Equip. and Supp.	29	5	2	3	6	1	0	0	0	0	22	4	2	2	6	6	1	0	1	0	04.09	39
277.358-026	Sales Worker, Tractor and Farm Implements	12	2	1	1	0	2	1	1	0	0	5	0	0	0	0	5	1	0	1	0	04.09	39
278.358-010	Sales Worker, Gas or Electric Appliances	2	1	1	0	0	1	1	1	0	0						1	0	0	0	0	04.10	38
278.358-018	Sales Worker, Radio and Television Parts	1	0	0	0	0	1	0	0	0	0											04.10	38
278.358-030	Salesperson, Television and Appliances	2	0	0	0	0	2	0	0	0	0											04.10	38
280.358-014	Sales Worker, Automobile	19	2	1	1	8	11	1	0	1	0	7	1	1	0	8	1	0	0	0	0	04.03	40
280.358-018	Sales Worker, Automobile Parts	10	2	1	1	4	5	0	0	0	0	3	1	1	0	4	2	1	0	1	0	04.03	40
280.358-026	Sales Worker, House Trailers	2	0	0	0	0	2	0	0	0	0											04.03	40
280.358-034	Sales Worker, Motor Vehicle and Supplies	4	0	0	0	0											4	0	0	0	0	04.03	40
280.458-010	Salesperson, Automobile Accessories	6	0	0	0	0						3	0	0	0	0	3	0	0	0	0	04.03	40
281.358-026	Sales Worker, Office Machines	18	3	1	2	4	3	1	1	0	0						15	2	0	2	4	04.12	37
282.358-010	Sales Worker, Veterinarian Supplies	4	1	1	0	6					0	4	1	1	0	6						01.0299	41
283.358-014	Salesperson, Jewelry	12	0	0	0	0	8	0	0	0	0						4	0	0	0	0	04.02	36
286.358-014	Sales Worker, Hobbies and Crafts	4	1	1	0	0	1	1	1	0	0						3	0	0	0	0	04.18	42
286.358-018	Salesperson, Sporting Goods	4	0	0	0	0											4	0	0	0	0	04.18	42
289.358	Counter Worker, Farm Eqp. Parts	7	0	0	0	1						4	0	0	0	1	3	0	0	0	0		
289.358-014	Sales Worker, General	1	0	0	0	1											1	0	0	0	1	04.12	37
289.358-018	Sales Worker, General Merchandise	135	30	30	0	0						135	30	30	0	0						04.31	
289.358-022	Sales Worker, House-to-House	1	0	0	0	0											1	0	0	0	0	04.20	44

* Program

36 - Apparel and Accessories
37 - Industrial Marketing
38 - Home Furnishings
39 - Hdwe., Bldg. Materials, Farm and Garden Supplies and Eqp.
40 - Automotive
41 - Ag. Supplies/Services, Other
42 - Recreation and Tourism
43 - Wholesale Trade, Other
44 - Retail Trade, Other

** Whenever a blank appears in this column, there were no identifiable instructional programs.

CLERICAL AND SALES OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No **	Program *
289.358-046	Salesperson, Parts	23	1	0	1	2	10	0	0	0	0	4	0	0	0	0	9	1	0	1	2	04.03	40
289.458-014	Salesperson, General	255	52	10	42	73	26	0	0	0	0	46	3	2	1	20	183	49	8	41	53	04.08	8
	Total	692	115	55	60	116	100	9	8	1	3	249	42	37	5	48	343	64	10	54	65		
Merchandising, Except Sales Workers																							
290.468-014	Manager, Branch Store	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0	04.15	45
290.478-014	Sales Clerk	5	0	0	0	0											5	0	0	0	0	04.08	8
290.877-010	Salesperson, Food	24	0	0	0	0	17	0	0	0	0						7	0	0	0	0	04.06	34
291.868	Newspaper Carrier	63	0	0	0	0											63	0	0	0	0		
292.358-010	Sales Worker - Driver	24	0	0	0	0	12	0	0	0	0	3	0	0	0	0	9	0	0	0	0	04.06	34
292.887-010	Sales Worker - Driver Helper	3	1	1	0	2	3	1	1	0	2											04.06	34
294.258-010	Auctioneer	6	0	0	0	0						5	0	0	0	0	1	0	0	0	0	04.08	8
298.081-010	Display Worker	9	0	0	0	1	5	0	0	0	0	1	0	0	0	1	3	0	0	0	0	04.01	32
299.138-014	Department Head, Supermarket	6	1	1	0	0	1	1	1	0	0	2	0	0	0	0	3	0	0	0	0	04.06	34
299.138-022	Manager, Department	51	0	0	0	3						4	0	0	0	3	47	0	0	0	0	04.08	8
299.468-010	Cashier - Checker	38	10	1	9	10	14	3	0	3	2	2	0	0	0	0	22	7	1	6	8	04.06	34
299.884-014	Optician Dispensing	1	0	0	0	0	1	0	0	0	0											07.0601	46
	Total	232	12	3	9	16	54	5	2	3	4	17	0	0	0	4	161	7	1	6	8		
	TOTAL CLERICAL AND SALES OCCUPATIONS	2068	280	100	180	312	333	35	16	19	18	428	63	48	15	104	1307	182	36	146	190		

* Program
8 - General Merchandise
32 - Advertising Services
34 - Food Distribution
40 - Automative
45 - Personal Services
46 - Ophthalmic Dispensing

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Domestic																							
303.138-010	Housekeeper, Home	1	0	0	0	0	1	0	0	0	0											09.0205	1
303.878-010	Cook (Domestic)	1	0	0	0	0											1	0	0	0	0	09.0205	1
306.878-010	Homemaker	4	0	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0	09.0205	1
	Total	6	0	0	0	0	3	0	0	0	0	1	0	0	0	0	2	0	0	0	0		
Food and Beverage, Preparation and Service																							
310.868-010	Hostess, Restaurant or Coffee Shop	27	8	2	6	12	3	0	0	0	0						24	8	2	6	12	04.07	2
311.878-010	Waiter's Assistant	37	29	1	28	43	5	3	0	3	0	3	3	0	3	0	29	23	1	22	43	17.2904	3
311.878-014	Car Hop	26	3	0	3	3	9	0	0	0	0	10	2	0	2	2	7	1	0	1	1	17.2904	3
311.878-018	Cook Steam Table	5	2	0	2	2											5	2	0	2	2	17.2904	3
311.878-022	Counterman, Cafeteria	1	1	0	1	0						1	1	0	1	0						17.2904	3
311.878-054	Waiter, Formal	18	0	0	0	0											18	0	0	0	0	17.2904	3
311.878-058	Waiter, Informal	361	186	18	168	303	87	24	4	20	29	30	20	1	19	24	244	142	13	129	250	17.2904	3
312.878	Bartender	36	23	4	19	28	6	0	0	0	0	11	11	4	7	0	19	12	0	12	28		
313.131-010	Chef	5	1	0	1	0											5	1	0	1	0	17.2902	4
313.138-014	Pastry Chef	1	0	0	0	0											1	0	0	0	0	09.0202	4
313.168-010	Executive Chef	1	0	0	0	0											1	0	0	0	0	17.2902	4
313.381-010	Baker, Pizza	14	3	0	3	0						14	3	0	3	0						17.2901	5
313.381-018	Cook (Hotel and Restaurant)	257	38	5	33	45	58	4	0	4	2	59	12	1	11	11	140	22	4	18	32	17.2902	4
313.781-010	Baker	1	0	0	0	0											1	0	0	0	0	17.2901	5
314.381-010	Cook, Short Order	34	5	2	3	8	16	0	0	0	0	4	1	0	1	2	14	4	2	2	6	17.2902	4
315.381-010	Cook	8	0	0	0	0											8	0	0	0	0	17.2902	4
315.381-030	Cook, Ranch	3	0	0	0	0											3	0	0	0	0	17.2902	4
316.884-018	Meat Cutter	23	1	1	0	8	8	0	0	0	1	9	1	1	0	7	6	0	0	0	0	17.2903	6
317.884-018	Pantryman	4	2	1	1	4											4	2	1	1	4	17.2902	4
317.887-010	Cook Helper	10	1	0	1	3	4	0	0	0	0	2	0	0	0	0	4	1	0	1	3	17.2902	4

* Program
1 - Institutional and Home Management and Services
2 - Food Services
3 - Waiter/Waitress
4 - Cook/Chef
5 - Baker
6 - Meat Cutter

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	New No **	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
318.887	Kitchen Helper	136	53	5	48	88	22	5	1	4	0	19	4	0	4	4	95	44	4	40	8		
319.138-010	Food Service Supervisor	1	1	0	1	0											1	1	0	1	0	09.0203	7
319.878-010	Fountain Man	25	8	3	5	14						10	2	0	2	2	15	6	3	3	12	17.2904	3
	Total	1034	365	42	323	561	218	36	5	31	32	172	60	7	53	52	644	269	30	239	477		
Lodging and Related Services																							
320.137-010	Manager, Lodging Facilities	17	0	0	0	1	10	0	0	0	0						7	0	0	0	1	04.11	8
321.138-010	Housekeeper	35	9	1	8	12	3	0	0	0	0	14	3	1	5	0	18	6	0	6	12	09.0205	1
323.887	Houseman	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0		
323.887-014	Maid II	123	48	15	33	113	13	4	0	4	0						110	44	15	29	113	09.0205	1
323.887-018	Maid, Hospital	9	0	0	0	0											9	0	0	0	0	09.0205	
324.878-014	Bellman	2	1	0	1	2											2	1	0	1	2	04.11	8
	Total	188	58	16	42	128	27	4	0	4	0	14	3	1	2	0	147	51	15	36	128		
Barbering, Cosmetology and Related Services																							
330.371-010	Barber	1	0	0	0	0											1	0	0	0	0	17.2601	9
332.271-010	Cosmetologist	33	6	4	2	8	11	1	0	1	0	4	2	1	1	3	18	3	3	0	5	17.2602	10
338.381-010	Embalmer	2	0	0	0	0											2	0	0	0	0	07.0909	11
	Total	36	6	4	2	8	11	1	0	1	0	4	2	1	1	3	21	3	3	0	5		
Amusement and Recreation Services																							
340.368-010	Deskman, Bowling Floor	8	0	0	0	0	4	0	0	0	0						4	0	0	0	0	04.18	12
341.368-010	Recreational Facility Attendant	4	1	1	0	0	4	1	1	0	0											04.18	12
	Total	12	1	1	0	0	8	1	1	0	0						4	0	0	0	0		

* Program
1 - Institutional and Home Management and Services
3 - Waiter/Waitress
7 - Food Management, Production and Services
8 - Hotel and Lodging
9 - Barbering
10 - Cosmetology
11 - Mortuary Science
12 - Recreation and Tourism

** Whenever a blank appears in this column, there were no identifiable instructional programs.

SERVICE OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Miscellaneous Personal Services																							
352.168-010	Director, Recreation	1	0	0	0	0											1	0	0	0	0	04.18	12
354.878-014	Home Attendant	1	1	1	0	0						1	1	1	0	0						04.0307	13
355.878	Locker Room Attendant	6	1	0	1	1											6	1	0	1	1		
355.878-010	Ambulance Attendant	2	0	0	0	0											2	0	0	0	0	07.0907	14
355.878-014	Attendant, Physical Therapy	3	1	0	1	0						2	0	0	0	0	1	1	0	1	0	07.0402	15
355.878-026	Emergency Entrance Attendant	3	0	0	0	0											3	0	0	0	0	07.0907	14
355.878-034	Nurse Aid	164	58	1	57	94	14	0	0	0	0	64	13	1	12	5	86	45	0	45	89	07.0303	16
355.878-038	Orderly	3	1	0	1	2											3	1	0	1	2	07.0303	16
356.874-038	Kennelman	1	0	0	0	0	1	0	0	0	0											01.99	17
356.874-046	Veterinary Hospital Attendant	5	1	1	0	1											5	1	1	0	1	01.0299	18
359.878	Funeral Attendant	2	7	1	6	2						2	7	1	6	2							
359.878-026	Child Care Assistant	6	1	1	0	1	3	0	0	0	0	3	1	1	0	1						09.0201	19
	Total	197	71	5	66	101	18	0	0	0	0	72	22	4	18	8	107	49	1	48	93		
Apparel and Furnishings Services																							
361.138-010	Laundry Foreman	1	0	0	0	0						1	0	0	0	0						17.1602	20
361.885-022	Laundryman	25	9	3	6	5	3	0	0	0	0	5	2	0	2	0	17	7	3	4	5	17.1602	20
361.885-034	Washer, Machine	1	0	0	0	0											1	0	0	0	0	17.1602	20
361.887-010	Laundry, Laborer	16	0	0	0	0											16	0	0	0	0	17.1603	20
362.381-010	Spotter	2	1	1	0	0	2	1	1	0	0											17.1601	21
362.782	Dry Cleaner	8	0	0	0	0	2	0	0	0	0						6	0	0	0	0		
362.886-010	Dry Cleaner Helper	1	0	0	0	0											1	0	0	0	0	17.1601	21
363.781-010	Silk Finisher	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0						17.1601	21
363.782-018	Presser, Machine	2	0	0	0	0						1	0	0	0	0	1	0	0	0	0	17.16	22
363.886-010	Flatwork Finisher	2	0	0	0	0						2	0	0	0	0						17.1602	20
365.381-014	Shoe Repairer	4	0	0	0	0											4	0	0	0	0	17.3402	23
365.884-010	Shoe Repairer, Helper	2	0	0	0	0											2	0	0	0	0	17.3402	23

* Program

12 - Recreation and Tourism
13 - Home Health Aide
14 - Medical Emergency Technician
15 - Physical Therapy
16 - Nursing Assistance
17 - Agriculture, Other
18 - Agricultural Supplies/Services, Other
19 - Care and Guidance of Children
20 - Laundering
21 - Drycleaning
22 - Fabric Maintenance Services
23 - Shoe Repair

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
369.138-010	Dry Cleaning Superintendent	6	0	0	0	0						1	0	0	0	0	5	0	0	0	0	04.15	24
369.478-014	Service Establishment Attendant	3	0	0	0	0						3	0	0	0	0						04.15	24
369.887-010	Folder	2	1	1	0	0						2	1	1	0	0						17.1602	20
	Total	77	11	5	6	5	8	1	1	0	0	16	3	1	2	0	53	7	3	4	5		
Protective Services																							
375.118-010	Police Chief	1	0	0	0	0											1	0	0	0	0	17.2802	25
375.168-046	Police Captain, Precinct	1	1	0	1	1											1	1	0	1	1	17.2802	25
375.168-054	Police Sargeant, Precinct	1	0	0	0	0											1	0	0	0	0	17.2802	25
375.268-030	Patrolman	6	1	0	1	2	1	0	0	0	0						5	1	0	1	2	17.2802	25
375.588-010	Parking Enforcement Officer	1	1	0	1	1											1	1	0	1	1	17.2802	25
377.868-014	Matron	11	1	0	1	0	5	1	0	1	0						6	0	0	0	0	17.2802	25
379.368	Dispatcher, Radio	6	4	0	4	9											6	4	0	4	9		
379.868	Lifeguard	3	0	0	0	0	3	0	0	0	0												
	Total	30	8	0	8	13	9	1	0	1	0						21	7	0	7	13		
Building and Related Services																							
381.887-014	Porter, Head	1	0	0	0	0											1	0	0	0	0	17.11	26
381.887-026	Porter I	15	4	0	4	6											15	4	0	4	6	17.11	26
382.884-010	Janitor I	208	26	2	24	35	22	2	0	2	1	39	12	0	12	15	147	12	2	10	19	17.11	26
	Total	224	30	2	28	41	22	2	0	2	1	39	12	0	12	15	163	16	2	14	25		
	TOTAL SERVICE OCCUPATIONS	1804	550	75	475	857	324	46	7	39	33	318	102	14	88	78	1162	402	54	348	746		

* Program

20 - Laundering
24 - Personal Services
25 - Law Enforcement Training
26 - Custodial Services

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Plant Farming																							
401.181-010	Farmer Cash, Grain	2	0	0	0	0											2	0	0	0	0	01.0102	1
401.884-010	Farm Hand, Grain	2	0	0	0	0											2	0	0	0	0	01.0102	1
403.181-010	Vegetable Grower	1	0	0	0	0	1	0	0	0	0											01.0102	1
403.883-010	Farm Hand, Vegetable	2	0	0	0	0	2	0	0	0	0											01.0102	1
404.884-014	Tree Pruner	1	0	0	0	0	1	0	0	0	0											01.0299	2
405.181-014	Hay Farmer	1	0	0	0	0											1	0	0	0	0	01.0102	1
406.181-018	Seed Grower	2	0	0	0	0	2	0	0	0	0											01.0102	1
407.884-010	Grounds Keeper	4	1	0	1	2	3	0	0	0	0						1	1	0	1	2	01.0504	3
407.887	Cemetery Worker	4	1	0	1	5	1	0	0	0	0						3	1	0	1	5		
407.887-022	Park Worker	11	7	0	7	15						1	0	0	0	0	10	7	0	7	15	01.0602	4
409.168-010	Manager, Farm	7	0	0	0	0						1	0	0	0	0	6	0	0	0	0	01.0104	5
409.181-010	Farmer, Tenant	8	0	0	0	0	5	0	0	0	0						3	0	0	0	0	01.0104	5
409.883-010	Farm Equipment Operator	23	7	5	2	16	4	6	4	2	11	5	0	0	0	0	14	1	1	0	5	01.0301	6
	Total	68	16	5	11	38	19	6	4	2	11	7	0	0	0	0	42	10	1	9	27		
Animal Farming																							
411.181-010	Farmer, Dairy	6	1	0	1	0	3	0	0	0	0						3	1	0	1	0	01.0101	7
411.884-010	Farm Hand, Dairy	2	1	0	1	0	2	1	0	1	0											01.0101	7
412.181-018	Poultryman, Egg	1	0	0	0	0	1	0	0	0	0											01.0101	7
413.131-010	Stock Ranch Foreman	10	1	0	1	1	3	1	0	1	1	1	0	0	0	0	6	0	0	0	0	01.0101	7
413.181-010	Cattle Rancher	79	4	1	3	5	40	1	1	0	2	3	0	0	0	0	36	3	0	3	3	01.0101	7
413.181-018	Herdsman, Swine	1	0	0	0	0											1	0	0	0	0	01.0101	7
413.884-018	Farm Hand, Livestock	9	3	1	2	1	2	3	1	2	0	3	0	0	0	0	4	0	0	0	1	01.0101	7
413.884-030	Ranch Hand	90	44	31	13	16	36	18	9	9	11						56	26	22	4	5	01.0101	7
	Total	198	54	33	21	23	85	24	11	13	14	7	0	0	0	0	106	30	22	8	9		

*Program
1 - Plant Science
2 - Agriculture Supples/Services, Other
3 - Landscaping
4 - Recreation
5 - Farm Business Management
6 - Agricultural Power and Machinery
7 - Animal Science

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No **	Program *
Miscellaneous Farming and Related																							
421.181-010	Farmer, General	215	4	0	4	5	98	1	0	1	2	49	1	0	1	2	68	2	0	2	1	01.01	8
421.883-010	Farm Hand, General	113	30	9	21	15	39	8	2	6	0	31	7	4	3	5	43	15	3	12	10	01.01	8
422.887-014	Irrigator	4	0	0	0	0						1	0	0	0	0	3	0	0	0	0	01.036	9
423.999	Farm Couple	0	2	2	0	0	0	2	2	0	0												
429.131-010	Farm Foreman	1	0	0	0	0											1	0	0	0	0	01.01	8
	Total	333	36	11	25	20	137	11	4	7	2	81	8	4	4	7	115	17	3	14	11		
Agriculture Service																							
466.887-010	Livestock Caretaker, Yard or In Transit	47	13	0	13	19						23	7	0	7	7	24	6	0	6	12	01.0401	10
	Total	47	13	0	13	19						23	7	0	7	7	24	6	0	6	12		
	TOTAL FARMING, FISHERY, FORESTRY, AND RELATED OCCUPATIONS	646	119	49	70	100	241	41	19	22	27	118	15	4	11	14	287	63	26	37	59		

* Program
8 - Agricultural Production
9 - Water Management
10 - Food Products

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years		
Processing of Metals																							
500.380-010	Plater	1	0	0	0	0											1	0	0	0	0	17.2399	1
	Total	1	0	0	0	0											1	0	0	0	0		
Processing of Food, Tobacco and Related Products																							
520.885	Pellet Mill Operator	2	0	0	0	0						2	0	0	0	0							
520.885	Sausage Maker	3	0	0	0	0											3	0	0	0	0		
520.885-122	Feed Mixer	11	3	0	3	0						8	3	0	3	0	3	0	0	0	0	01.0202	2
520.885	Stuffer	1	0	0	0	0											1	0	0	0	0		
520.886-026	Feed Mixer Helper	4	0	0	0	0						2	0	0	0	0	2	0	0	0	0	01.0202	2
521.885	Meat Grinder	2	0	0	0	0											2	0	0	0	0		
521.885-302	Processor, Grain	3	1	0	1	0											3	1	0	1	0	01.0202	2
521.887	Skull Grinder	1	0	0	0	0											1	0	0	0	0		
522.782-010	Cottage Cheese Maker	2	0	0	0	0											2	0	0	0	0	01.0401	3
522.887	Pickler (Slaught. & Meat Pack.)	1	0	0	0	0											1	0	0	0	0		
523.887	Freezer Man	1	0	0	0	0											1	0	0	0	0		
525.381-010	Butcher, All-Round	36	6	0	6	0	2	0	0	0	0	16	5	0	5	0	18	1	0	1	0	01.0401	4
525.884	Boner, Meat	42	15	5	10	0	1	0	0	0	0	35	15	5	10	0	6	0	0	0	0		
525.884	Carcass Splitter	1	0	0	0	0											1	0	0	0	0		
525.884	Sticker, Animal	3	0	0	0	0	2	0	0	0	0						1	0	0	0	0		
525.885	Skin Peeling Machine Operator	2	0	0	0	0											2	0	0	0	0		
525.887	Cooler, Worker	5	2	0	2	0											5	2	0	2	0		
525.887	Washer, Carcass	1	0	0	0	0											1	0	0	0	0		
526.781-010	Baker	3	1	0	1	0											3	1	0	1	0	17.2901	5
529.138-026	Superintendent, Grain Elevator	3	0	0	0	0											3	0	0	0	0	01.0202	2
529.782-030	Dairy Processing Equipment Operator	5	0	0	0	0											5	0	0	0	0	01.0401	4
	Total	132	28	5	23	0	5	0	0	0	0	63	23	5	18	0	64	5	0	5	0		

* Program
1 - Metalworking, Other
2 - Feeds
3 - Dairy Products
4 - Food Products
5 - Baker

** Whenever a blank appears in this column, there were no identifiable instructional programs.

PROCESSING OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No **	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Processing of Chemicals, Plastics, Synthetics, Rubber, Paint, and Related Products																							
550.885	Millman	16	5	3	2	7						16	5	3	2	7							
553.885	Cooker Man	2	0	0	0	0											2	0	0	0	0		
559.381	Rubber Tester	4	0	0	0	2						4	0	0	0	2							
	Total	22	5	3	2	9						20	5	3	2	9	2	0	0	0	0		
Processing of Stone, Clay, Glass, and Related Products																							
570.885	Concrete Mixer Operator	11	0	0	0	1	2	0	0	0	0	8	0	0	0	1	1	0	0	0	0		
579.137	Supervisor (Cement)	1	0	0	0	0						1	0	0	0	0							
579.886	Laborer, Concrete Plant	13	1	0	1	7						12	1	0	1	7	1	0	0	0	0		
	Total	25	1	0	1	8	2	0	0	0	0	21	1	0	1	8	2	0	0	0	0		
	TOTAL PROCESSING OCCUPATIONS	180	34	8	26	17	7	0	0	0	0	104	29	8	21	17	69	5	0	5	0		

* Program

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No **	Program *
Metal Machining																							
600.280-030	Machinist I	17	1	1	0	6											17	1	1	0	6	17.2302	1
600.380-022	Job Setter	2	0	0	0	0						2	0	0	0	0						17.2302	1
601.782-010	Knife Grinder	1	0	0	0	0											1	0	0	0	0	17.2307	2
604.885-034	Lathe Operator, Production	1	0	0	0	0						1	0	0	0	0						17.2303	3
	Total	21	1	1	0	6						3	0	0	0	0	18	1	1	0	6		
Metalworking, Other																							
610.381-010	Blacksmith	6	0	0	0	0	4	0	0	0	0						2	0	0	0	0	17.2399	4
619.380-022	Metal Fabricator	2	2	2	0	2						2	2	2	0	2						17.2304	5
619.380-030	Multi Operation Forming Machine	2	1	1	0	0						2	1	1	0	0						17.2305	
	Total	10	3	3	0	2	4	0	0	0	0	4	3	3	0	2	2	0	0	0	0		
Machines and Machinery Repairers																							
620.281-010	Air Conditioning Mechanic	1	1	1	0	0						1	1	1	0	0						17.01	6
620.281-014	Automobile Mechanic	58	3	2	1	9	15	2	2	0	0	21	0	0	0	8	22	1	0	1	1	17.0302	7
620.281-046	Construction Equipment Mechanic	12	2	2	0	4											12	2	2	0	4	17.1003	8
620.281-058	Engineering Equipment Mechanic	2	1	0	1	1											2	1	0	1	1	17.1003	8
620.281-062	Front End Man	1	0	0	0	0											1	0	0	0	0	17.0303	9
620.281-070	Mechanic, Industrial Truck	6	2	0	2	2											6	2	0	2	2	17.1003	8
620,381-014	Automobile Service Mechanic	25	8	4	4	8	2	2	2	0	0	3	0	0	0	1	20	6	2	4	7	17.0302	7
620.884	Wrecker	2	0	0	0	0											2	0	0	0	0		
620.884-010	Automobile Mechanic Helper	4	3	2	1	2											4	3	2	1	2	17.0302	7
624.281-010	Farm Equipment Mechanic	15	1	1	0	1	7	1	1	0	1	2	0	0	0	0	6	0	0	0	0	01.0301	10
624.281-014	Farm Equipment Mechanic Apprentice	2	1	1	0	0											2	1	1	0	0	01.0301	10
624.381-010	Farm Equipment Mechanic	2	0	0	0	0											2	0	0	0	0	01.0301	10

* Program

1 - Machine Shop
2 - Tool and Die Making
3 - Machine Tool Operation
4 - Metalworking, Other
5 - Metal Trades, Combined
6 - Air Conditioning
7 - Mechanics
8 - Maintenance, Heavy Equipment
9 - Specialization, Other
10 - Agricultural Power and Machinery

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No **	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
624.381-014	Farm Machinery Set-Up Man	4	0	0	0	0	2	0	0	0	0						2	0	0	0	0	01.0301	10
625.281-010	Diesel Mechanic	6	1	0	1	0											6	1	0	1	0	17.12	11
625.281-034	Gasoline Engine Repairer	2	0	0	0	0											2	0	0	0	0	17.31	12
626.281	Machine Repairer, Maintenance	2	20	0	20	40						2	20	0	20	40							
633.281-030	Office Machine Servicer	12	0	0	0	0	2	0	0	0	0						10	0	0	0	0	17.06	13
637.281-034	Refrigeration Mechanic	1	0	0	0	1											1	0	0	0	1	17.0101	14
638.281	Maintenance Mechanic	15	5	1	4	6						14	5	1	4	6	1	0	0	0	0		
638.281-026	Maintenance Technician	1	0	0	0	0											1	0	0	0	0	16.0111	15
638.281-034	Millwright	1	0	0	0	0											1	0	0	0	0	17.1099	16
639.381	Vending Machine Servicer	1	0	0	0	0											1	0	0	0	0		
639.884	Lawn Mower Repairer	1	0	0	0	0	1	0	0	0	0												
	Total	176	48	14	34	74	29	5	5	0	1	43	26	2	24	55	104	17	7	10	18		
Paperworking																							
641.885	Carton Forming Machine Tender	2	0	0	0	0											2	0	0	0	0		
	Total	2	0	0	0	0											2	0	0	0	0		
Printing																							
651.782-042	Offset Press Man	12	2	2	0	0	3	0	0	0	0						9	2	2	0	0	17.1902	17
	Total	12	2	2	0	0	3	0	0	0	0						9	2	2	0	0		
Wood Machining																							
666.782	Driller and Plugger	1	0	0	0	0	1	0	0	0	0												
	Total	1	0	0	0	0	1	0	0	0	0												

* Program

10 - Agricultural Power and Machinery
11 - Diesel Mechanics
12 - Small Engine Repair, Internal Combustion
13 - Business Machine Maintenance
14 - Cooling
15 - Industrial Technology
16 - Construction and Maintenance Trades, Other
17 - Printing Press Occupations

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years		
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Machine Trades, Other																							
690.782	Tuber Machine Operator	36	10	0	10	10						36	10	0	10	10							
	Total	36	10	0	10	10						36	10	0	10	10							
	TOTAL MACHINE TRADES OCCUPATIONS	258	64	20	44	92	37	5	5	0	1	86	39	5	34	67	135	20	10	10	24		

* Program

** Whenever a blank appears in this column, there were no identifiable instructional programs.

TABLE 8: BENCH WORK OCCUPATIONS

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Fabrication, Assembly and Repair of Metal Products																							
700.281	Jeweler	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0		
706.887	Assembler, Production	80	20	20	0	25						80	20	20	0	25							
	Total	82	20	20	0	25	1	0	0	0	0	80	20	20	0	25	1	0	0	0	0		
Fabrication and Repair of Scientific and Medical Apparatus, Photographic and Optical Goods, Watches and Clocks, and Related Products																							
711.381	Optician, Contact Lens Dispens.	1	0	0	0	0	1	0	0	0	0												
715.281-[illegible]	Repairer (Clock and Watch)	3	0	0	0	0											3	0	0	0	0	17.2102	1
715.281-030	Watchmaker	3	1	0	1	0	2	1	0	1	0						1	0	0	0	0	17.2102	1
	Total	7	1	0	1	0	3	1	0	1	0						4	0	0	0	0		
Assembly and Repair of Electrical Equipment																							
720.281-018	Television Service and Repairer	5	1	0	1	0	3	1	0	1	0	1	0	0	0	0	1	0	0	0	0	17.1503	2
724.781-022	Transformer Coil Winder	5	1	1	0	2	5	1	1	0	2											17.1403	3
724.884	Laminator	4	1	1	0	2	4	1	1	0	2												
726.781-010	Electronics Assembler	8	2	1	1	2	8	2	1	1	2											17.15	4
726.884	Capacitor Assembler	400	0	0	0	20						400	0	0	0	20							
	Total	422	5	3	2	26	20	5	3	2	6	401	0	0	0	20	1	0	0	0	0		
Fabrication and Repair of Products made from Assorted Materials																							
739.884-182	Picture Frame Maker	1	0	0	0	0											1	0	0	0	0	17.3699	5
739.887	Assembler, Small Products	282	5	5	0	5	30	5	5	0	5						252	0	0	0	0		
	Total	283	5	5	0	5	30	5	5	0	5						253	0	0	0	0		

* Program

1 - Watchmaking and Repair
2 - Radio/Television
3 - Motor Repairers
4 - Electronics Occupations
5 - Woodworking, Other

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Painting, Decorating and Related																							
741.884	Painter, Spray	4	1	0	1	1	2	1	0	1	1	2	0	0	0	0							
	Total	4	1	0	1	1	2	1	0	1	1	2	0	0	0	0							
Fabrication and Repair of Plastics, Synthetics, Rubber, and Related Products																							
759.687	Final Inspector	34	31	5	26	50						84	31	5	26	50							
759.884	Hose Wrapper	33	15	0	15	20						33	15	0	15	20							
	Total	117	46	5	41	70						117	46	5	41	70							
Fabrication and Repair of Sand, Stone, Clay and Glass Products																							
779.884	Plaster Maker	4	4	4	0	0											4	4	4	0	0		
	Total	4	4	4	0	0											4	4	4	0	0		
Fabrication and Repair of Textiles, Leather, and Related Products																							
780.381-018	Furniture Upholsterer	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0	17.35	6
785.281-010	Alteration Tailor	3	0	0	0	1						3	0	0	0	1						17.3302	7
785.381-026	Seamstress, Women's Garment Alterations	8	0	0	0	0											8	0	0	0	0	17.3301	8
	Total	13	0	0	0	1	1	0	0	0	0	3	0	0	0	1	9	0	0	0	0		
	TOTAL BENCH WORK OCCUPATIONS	932	82	37	45	128	57	12	8	4	12	603	66	25	41	116	272	4	4	0	0		

* Program
6 - Upholstering
7 - Tailoring
8 - Dressmaking

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	RCU Area 2 (5% Sample): Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	McCook Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	North Platte Area Sample: Now Emp	12 Month Need: Tot	Exp	T-O	Need Next 2 Years	New No**	Program *
Metal Fabrication, Other																							
804.281-010	Sheet Metal Worker	9	2	1	1	2	8	2	1	1	2						1	0	0	0	0	17.2305	1
806.381-034	New Car Get Ready Man	2	5	0	5	10	2	5	0	5	10											17.03	2
807.381-010	Automobile Body Repairer	12	1	1	0	5	4	0	0	0	0	2	1	1	0	3	6	0	0	0	2	17.0301	3
	Total	23	8	2	6	17	14	7	1	6	12	2	1	1	0	3	7	0	0	0	2		
Welders, Flame Cutters and Related																							
810.782-022	Welder, Spot I	2	1	0	1	1	2	1	0	1	1												
810.884-018	Welder, Arc	34	2	1	1	2	30	1	0	1	1	4	1	1	0	1						17.2306	4
812.884-010	Welder Apprentice, Combination	2	0	0	0	0											2	0	0	0	0	17.2306	4
812.884-014	Welder, Combination	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0	17.2306	4
812.884-018	Welder, Production Line	4	2	2	0	2						3	2	2	0	2	1	0	0	0	0	17.2306	4
819.381-022	Welder-Fitter	1	0	0	0	0											1	0	0	0	0	17.2306	4
	Total	45	5	3	2	5	33	2	0	2	2	7	3	3	0	3	5	0	0	0	0		
Electrical Assembly, Installing and Repairing																							
821.131	Line Supervisor	3	1	0	1	0											3	1	0	1	0		
821.281-010	Line Installer	9	1	1	0	1	2	0	0	0	0						7	1	1	0	1	17.1402	5
821.381-010	Cable Installer	2	2	2	0	0											2	2	2	0	0	17.1402	5
821.381-034	Line Installer (Construction)	8	0	0	0	0											8	0	0	0	0	17.1402	5
821.381-042	Lineman, Repair	2	1	0	1	0	2	1	0	1	0											17.1402	5
822.281-018	Combination Man	35	6	0	6	12	1	0	0	0	0						34	6	0	6	12	17.1501	6
822.281-026	Communication Man	3	1	0	1	0											3	1	0	1	0	17.1501	6
822.381-010	Cable Repairer	1	0	0	0	0											1	0	0	0	0	17.1402	5
822.381-026	Line Installer (Tel. and Tel.)	11	1	0	1	2											11	1	0	1	2	17.1402	5
822.381-050	Station Installer	66	8	0	8	16											66	8	0	8	16	17.1501	6
824.281-010	Electric Distribution Checker	1	0	0	0	0											1	0	0	0	0	17.1002	7
824.281-014	Electrician	5	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0	0	0	0	17.1002	7

* Program
1 - Sheet Metal
2 - Automotive Services
3 - Body and Fender
4 - Welding and Cutting
5 - Lineman
6 - Communications
7 - Electricity

** Whenever a blank appears in this column, there were no identifiable instructional programs.

STRUCTURAL WORK OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
827.281-014	Electrical Appliance Servicer	5	0	0	0	0	1	0	0	0	0						4	0	0	0	0	17.0201	8
827.281-022	Household Appliance Repairer	4	0	0	0	0						2	0	0	0	0	2	0	0	0	0	17.02	9
827.884	Assembler, Electrical	8	1	1	0	3	3	1	1	0	1						5	0	0	0	2		
827.887-010	Electrical Appliance Servicer Helper	2	0	0	0	0											2	0	0	0	0	17.0201	8
828.281-022	Electronics Mechanic	2	0	0	0	0											2	0	0	0	0	16.0108	10
829.281-038	Pinsetter Mechanic, Automatic	2	1	1	0	1	1	0	0	0	0						1	1	1	0	1	17.1401	11
829.381-010	Cable Splicer	18	5	0	5	10											18	5	0	5	10	17.1402	5
829.887-014	Electrician Helper	1	0	0	0	0	1	0	0	0	0											17.1002	7
	Total	188	28	5	23	45	12	2	1	1	1	3	0	0	0	0	173	26	4	22	44		
Painting, Plastering, Waterproofing, Cementing and Related																							
840.781-010	Painter	3	1	1	0	3						1	1	1	0	2	2	0	0	0	1	17.1005	12
841.781-014	Paperhanger	1	1	0	1	1						1	1	0	1	1						17.1005	12
842.884-010	Dry Wall Applicator	3	1	1	0	2	3	1	1	0	2											17.1008	13
844.884-018	Cement Mason, Maintenance	3	0	0	0	0											3	0	0	0	0	17.1099	14
844.884-034	Concrete Rubber	3	2	1	1	2						3	2	1	1	2						17.1099	14
845.781-018	Painter, Automobile	2	0	0	0	2						2	0	0	0	2						17.0301	3
	Total	15	5	3	2	10	3	1	1	0	2	7	4	2	2	7	5	0	0	0	1		
Excavating, Grading, Paving and Related																							
850.883-010	Bulldozer Operator I	2	2	2	0	1	1	2	2	0	0	1	0	0	0	1						17.1003	15
850.883-018	Dredge Operator	2	1	1	0	1											2	1	1	0	1	17.1003	15
850.883-054	Trench Digging Machine Operator	7	2	0	2	0											7	2	0	2	0	17.1003	15
852.883-014	Concrete Paving Machine Operator	2	0	0	0	0											2	0	0	0	0	17.1003	15
852.887	Laborer, Concrete Paving	20	10	6	4	20											20	10	6	4	20		
853.883-010	Asphalt Paving Machine Operator	1	0	0	0	0											1	0	0	0	0	17.1003	15
853.884-010	Asphalt Raker	34	10	6	4	20											34	10	6	4	20	17.1099	14

* Program

3 - Body and Fender
5 - Lineman
7 - Electricity
8 - Electrical Appliances
9 - Appliance Repair
10 - Electronic Technology
11 - Industrial Technician
12 - Painting and Decorating
13 - Drywall Installation
14 - Construction and Maintenance Trades, Other
15 - Heavy Equipment

** Whenever a blank appears in this column, there were no identifiable instructional programs.

STRUCTURAL WORK OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					New No**	Program *
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years		
859.782-030	Well Drill Operator, Cable Tool	8	1	1	0	2						8	1	1	0	2						17.1003	15
859.884	Well Drill Operator Helper, Cable Tool	3	1	0	1	1						3	1	0	1	1							
	Total	79	27	16	11	45	1	2	2	0	0	12	2	1	1	4	66	23	13	10	41		
Construction, Other																							
860.131-018	Carpenter Supervisor	2	0	0	0	0						2	0	0	0	0						17.1001	16
860.137-010	Carpenter - Labor Supervisor	7	0	0	0	0						2	0	0	0	0	5	0	0	0	0	17.1001	16
860.381-026	Carpenter	68	8	7	1	10	8	0	0	0	0	8	1	1	0	3	52	7	6	1	7	17.1001	16
860.887-018	Laborer, Carpentry	101	15	10	5	30						22	0	0	0	6	79	15	10	5	24	17.1001	16
861.381-010	Bricklayer	2	0	0	0	0						1	0	0	0	0	1	0	0	0	0	17.1004	17
861.381-046	Monument Setter	2	0	0	0	0											2	0	0	0	0	17.1004	17
862.138	Water and Sewer Systems Supervisor	1	0	0	0	0											1	0	0	0	0		
862.381-026	Gas Main Fitter	12	2	2	0	2											12	2	2	0	2	17.1007	18
862.381-042	Pipe Fitter I	17	1	0	1	3	5	1	0	1	1						12	0	0	0	2	17.1007	18
862.381-074	Plumber	7	0	0	0	0	4	0	0	0	0	1	0	0	0	0	2	0	0	0	0	17.1007	18
862.884	Soft Water Servicer	5	0	0	0	0	5	0	0	0	0												
862.884	Plumber Helper	1	0	0	0	1											1	0	0	0	1		
864.781-010	Floor Layer	2	2	0	2	0											2	2	0	2	0	17.1099	14
865.781-010	Glazier	2	0	0	0	0	2	0	0	0	0											17.1009	19
865.884-014	Glass Installer	1	0	0	0	0	1	0	0	0	0											17.1009	19
866.381-010	Roofer	7	0	0	0	0	2	0	0	0	0						5	0	0	0	0	17.1010	20
866.884-010	Corrugated Sheet Metal Sheeter	1	0	0	0	0											1	0	0	0	0	17.1010	20
869.133	Cleaning Supervisor	2	0	0	0	1											2	0	0	0	1		
869.281-014	House Builder	1	0	0	0	0											1	0	0	0	0	17.10	14
869.281-018	House Mover	3	2	2	0	0	1	0	0	0	0						2	2	2	0	0	17.1099	14
869.884	Construction Worker I	7	6	5	1	0	7	6	5	1	0												

* Program
14 - Construction and Maintenance Trades, Other
15 - Heavy Equipment
16 - Carpentry
17 - Masonry
18 - Plumbing and Pipe Fitting
19 - Glazing
20 - Roofing

** Whenever a blank appears in this column, there were no identifiable instructional programs.

STRUCTURAL WORK OCCUPATIONS continued

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No**	Program *
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years		
869.884-062	Rig Builder	1	0	0	0	0						1	0	0	0	0						17.1099	14
869.884	Form Setter, Steel Forms	2	2	1	1	2						2	2	1	1	2							
	Total	254	38	27	11	49	35	7	5	2	1	39	3	2	1	11	180	28	20	8	37		
Structural Work, Other																							
899.281	Maintenance Man, Factory or Mill	10	1	1	0	3											10	1	1	0	3		
899.381-010	Maintenance Man, Building	39	5	2	3	3	5	0	0	0	0	9	4	2	2	3	25	1	0	1	0	17.10	14
899.884	Sewer Pipe Cleaner	4	1	0	1	3	1	0	0	0	0						3	1	0	1	3		
899.884	Highway Maintenance Worker	25	5	0	5	15											25	5	0	5	15		
	Total	78	12	3	9	24	6	0	0	0	0	9	4	2	2	3	63	8	1	7	21		
	TOTAL STRUCTURAL WORK OCCUPATIONS	682	123	59	64	195	104	21	10	11	18	79	17	11	6	31	499	85	38	47	146		

* Program
14 - Construction and Maintenance Trades, Other

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew * No**	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Motor Freight																							
900.883	Concrete Mixing Truck Driver	2	0	0	0	0	2	0	0	0	0												
902.883	Dump Truck Driver	8	0	0	0	1						2	0	0	0	0	6	0	0	0	1		
903.883	Tank Truck Driver	27	2	2	0	1	13	0	0	0	0	4	1	1	0	1	10	1	1	0	0		
904.883	Tractor Trailer Truck Driver	4	0	0	0	0	3	0	0	0	0						1	0	0	0	0		
905.883	Truck Driver, Heavy	159	53	6	47	15	18	1	0	1	0	42	13	6	7	9	99	39	0	39	6		
906.883	Truck Driver, Light	34	6	1	5	11	12	1	0	1	2	11	4	1	3	9	11	1	0	1	0		
	Total	234	61	9	52	28	48	2	0	2	2	59	18	8	10	19	127	41	1	40	7		
Transportation, Other																							
910.137	Road Supervisor of Engines	1	0	0	0	0											1	0	0	0	0		
910.138	Conductor, Yard	6	0	0	0	0											6	0	0	0	0		
910.138	Station Agent	1	0	0	0	0											1	0	0	0	0		
910.368	Railway Express Clerk	96	0	0	0	0											96	0	0	0	0		
910.883	Yard Engineer	28	0	0	0	0											28	0	0	0	0		
910.883	Car Retarder Operator	14	0	0	0	0											14	0	0	0	0		
910.887	Switch Tender	180	0	0	0	0											180	0	0	0	0		
912.368-010	Airplane Dispatch Clerk	10	1	1	0	2											10	1	1	0	2	04.19	1
912.368-022	Reservations Agent	2	0	0	0	2						2	0	0	0	2						04.19	1
913.168	Taxicab Starter	1	0	0	0	0	1	0	0	0	0												
913.463-010	Bus Driver	68	3	0	3	6	21	1	0	1	0	23	1	0	1	3	24	1	0	1	3	04.19	1
913.463-018	Taxi Driver	4	0	0	0	0	4	0	0	0	0											04.19	1
915.867-010	Automobile Service Station Attendant	154	28	6	22	34	38	4	3	1	0	8	2	0	2	3	108	22	3	19	31	04.16	2
915.884	Garage Service Worker	2	0	0	0	0											2	0	0	0	0		
915.887	Lubrication Worker	5	0	0	0	0	1	0	0	0	0						4	0	0	0	0		
919.168-010	Dispatcher, Motor Vehicles	13	0	0	0	0											13	0	0	0	0	14.0505	3
	Total	585	32	7	25	44	65	5	3	2	0	33	3	0	3	8	487	24	4	20	36		

* Program
1 - Transportation
2 - Petroleum
3 - Traffic, Rate, and Transportation Clerk

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCL Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Now Emp	12 Month Need Tot	Exp	T-O	Need Next 2 Years	Hew No**	Program *
Packaging and Materials Handling																							
920.885	Packager, Machine	8	0	0	0	0	8	0	0	0	0												
920.887	Packager, Hand	48	1	0	1	0	2	0	0	0	0	8	0	0	0	0	38	1	0	1	0		
920.887-022	Bagger	28	18	2	16	12	8	3	2	1	2	1	0	0	0	0	19	15	0	15	10	04.06	4
921.883	Conveyor Operator	11	1	0	1	1	3	1	0	1	0						8	0	0	0	1		
922.138	Platform Supervisor	1	0	0	0	0											1	0	0	0	0		
922.883	Fork Lift Truck Operator	5	0	0	0	0											5	0	0	0	0		
922.887-070	Laborer, Stores	71	13	0	13	27	2	0	0	0	0	16	5	0	5	11	53	8	0	8	16	04.20	5
929.137-026	Yardman I	6	0	0	0	0	5	0	0	0	0	1	0	0	0	0						04.09	6
929.138	Warehouse Supervisor	6	2	0	2	3						6	2	0	2	3							
929.887	Dumper	2	0	0	0	0	2	0	0	0	0												
929.887-050	Material Handler	5	2	0	2	0											5	2	0	2	0	04.19	1
	Total	191	37	2	35	43	30	4	2	2	2	32	7	0	7	14	129	26	0	26	27		
Production and Distribution of Utilities																							
950.782-054	Stationary Engineer	7	1	0	1	0											7	1	0	1	0	17.32	7
952.131	Substation Operator, Chief	1	0	0	0	1											1	0	0	0	1		
952.782-030	Power Plant Operator I	11	1	0	1	4	3	1	0	1	0						8	0	0	0	4	17.32	7
952.782-042	Substation Operator	7	4	2	2	8											7	4	2	2	8	17.3201	8
953.884	Gas Meter Installer	2	0	0	0	0											2	0	0	0	0		
954.782	Ditch Rider	7	0	0	0	1						7	0	0	0	1							
952.782-014	Pump Station Operator, Water Works	2	0	0	0	0	1	0	0	0	0						1	0	0	0	0	17.3202	9
954.782	Watershed Tender	10	0	0	0	0						10	0	0	0	0							
954.782	Water Treatment Plant Operator	3	0	0	0	0											3	0	0	0	0		
955.782-018	Sewage Plant Operator	3	0	0	0	2											3	0	0	0	2	17.3202	9
955.887	Street Cleaner, Utility Worker	16	2	1	1	5	6	0	0	0	0	1	0	0	0	0	9	2	1	1	5		
957.388	Program Transmission Supervisor	1	0	0	0	0						1	0	0	0	0							
	Total	70	8	3	5	21	10	1	0	1	0	19	0	0	0	1	41	7	3	4	20		

* Program
1 - Transportation
4 - Food Distribution
5 - Retail Trade, Other
6 - Hdwe., Building Materials, Farm and Garden Supplies and Eqp.
7 - Stationary Energy Sources Occupations
8 - Electric Power Generating Plants
9 - Pumping Plants

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample						
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Hew No **	Program *
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
Graphic Art Work																							
970.381-046	Painter, Sign	4	1	1	0	1						3	1	1	0	1	1	0	0	0	0	17.07	10
972.382-010	Photographer, Lithographic	2	0	0	0	0											2	0	0	0	0	17.1903	11
973.381-010	Compositor I	24	3	0	3	0	13	3	0	3	0						11	0	0	0	0	17.1901	12
973.381-026	Job Printer	4	1	0	1	0	4	1	0	1	0											17.1901	12
	Total	34	5	1	4	1	17	4	0	4	0	3	1	1	0	1	14	0	0	0	0		
	TOTAL MISCELLANEOUS OCCUPATIONS	1114	143	22	121	137	170	16	5	11	4	146	29	9	20	43	798	98	8	90	90		

* Program
10 - Commercial Arts Occupations
11 - Lithography, Photography and Platemaking
12 - Composition, Makeup and Typesetting

** Whenever a blank appears in this column, there were no identifiable instructional programs.

D.O.T. Number	Job Title	Total of All Samples					RCU Area 2 (5% Sample)					McCook Area Sample					North Platte Area Sample					Hew No **	Program *
		Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years	Now Emp	12 Month Need			Need Next 2 Years		
			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			Tot	Exp	T-O			
	Teacher Aides	61	6	0	6	12	4	0	0	0	0	19	6	0	6	12	38	0	0	0	0		
	Car Wash Worker	4	0	0	0	2						2	0	0	0	2	2	0	0	0	0		
	Total	65	6	0	6	14	4	0	0	0	0	21	6	0	6	14	40	0	0	0	0		

* Program

** Whenever a blank appears in this column, there were no identifiable instructional programs.

APPENDIX H

COOPERATIVE EDUCATION RESOURCE SURVEY

MID-PLAINS NEBRASKA TECHNICAL
COMMUNITY COLLEGE AREA

COOPERATIVE EDUCATION RESOURCE SURVEY

PLEASE PRINT

Firm Name_____Address_____

Person Interviewed_____Phone_____

Date_____

. Do you have minimal educational requirements for employment with your firm or organization? _____Yes _____No

. If yes, give the requirements._____

. Please indicate the minimum age for employment._____

Please respond to your interest area by placing the appropriate number (1-2-3) in the space provided in front of each statement. Please respond to all ten (10) statements.

Code: (1) Would like to participate in this area.
(2) Have an interest, but not sure about participation.
(3) Would not like to participate in any way.

My company and/or organization would like to participate in the Mid-Plains Nebraska Technical Community College Area Cooperative Education Resource Project by:

1. _____Making available opportunities for meaningful field trips to my business.

2. _____Providing personnel to talk to interested students about my business and its career potential.

3. _____Providing a student or students a mini-course in a career area.

4. _____Providing a student or students a part-time, on-site work experience opportunities.

5. _____Providing a student or students part-time, on-site career awareness opportunities.

6. _____Reporting the employment needs of my business to a student placement service at my area community college.

7. _____Providing inservice experiences for teachers, counselors, and administrative staff from the area community college, so they might become more aware of the needs associated with a particular career area.

8. _____Helping to form an industry/education council to broaden community involvement in cooperative education.

9. _____Participation in programs that would involve the exchange of some resources, such as facilities, personnel, equipment, and time.

10. _____Serving on a Community Cooperative Education Advisory Committee to coordinate available community resources with education programs.

If you have any other recommendations as to how you could assist in a program of cooperative education, please use the back of this form.